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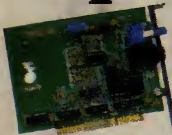


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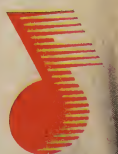
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A first wave of compact disc computer games are headed from the horizon to your living room.

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Et tu, game player? Command the mighty Roman

Legions in Electronic Arts' innovative *Centurion: Defender of Rome* from award-winning designer Kellyn Beck.

HANDICAPPING THE GOLF GAMES

From tee to sand trap to lake to green, three of the newest and most feature-laden golf simulations available for the PC.

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oleon march to the tunes of different drummers in covering the Little Corporal's martial exploits.

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DragonStrike is a flight simulator with a scaley difference—aerial combat astride a *real* monster!

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information from the world
of PC game playing.

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GAME **Player's**TM **PC STRATEGY GUIDE**

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EDITOR'S NOTES

SIERRA AND THE CHALLENGE OF CD GAMES

PC game players will be hearing a lot this fall about the first wave of computer-based compact disc (CD) games available for consumers. Several game software companies — with Sierra On-Line being the most aggressive among them — are preparing to produce, distribute, and help promote computer games that use CD-ROM (compact disc-read only memory) drives.

CD-ROM is one of several compact disc formats currently in various stages of development and consumer introduction. While most of us are now familiar with the CD audio players and discs that have taken the music industry by storm, a much smaller segment of the general public follows the CD-ROM, CD-I (Interactive), CD + Graphics, CD-V (Video), CD-ROM XA (Extended Architecture), and other laser-based disc developments.

Compact discs, in whatever form, store tremendous amounts of data. One CD, for example, can store the equivalent of hundreds of floppy disks on just one 600 megabyte compact disc. But as yet there is no standard platform for a format such as CD-I as there is for CD audio.

Everyone seems to agree that we're on the verge of a new era in electronic gaming, education, and productivity software — a *multimedia* revolution in which television-quality video, stereo sound, digitized voices, tremendous storage, and easy-to-use controls combine to create a new, rich interactive environment. But so far the promise is largely unrealized, although new announcements are made every day.

For example, Commodore International, manufacturer of the Amiga computer, an-

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EDITOR'S NOTES

continued from page 4.

nounced in June that it will sell CDTV (Commodore Dynamic Total Vision), an interactive multimedia machine based on the Amiga 500 computer and compact disc technology. The



One of Sierra's first two CD-ROM games is the delightful *Mixed-Up Mother Goose*.

company hopes to have as many as a hundred CDTV software titles, including games, when the machine ships to stores this fall.

As Commodore works on CDTV, American Interactive Media (AIM), a division of CD audio pioneer Philips, continues preparing for the launch of its own CD-Interactive player for the consumer market. Radio Shack's parent company, Tandy, continues to work on its THOR writable technology. The list goes on as different companies attempt to determine what the consumer will buy, and for what price.

For those of us who have followed the slow (and often confusing) attempts to bring CD technology to consumers for the past several years, Sierra's effort is a welcome trial balloon that may set the stage for what's surely coming (in one form or another) later in the decade.

For Sierra and the others involved in this effort, the introduction of CD-ROM games is a bold move. While many game software companies are scurrying to get a piece of the multi-billion-dollar videogame (Nintendo, Sega, NEC, Atari)

market, Sierra is foregoing what its president, Ken Williams, sees as short-term profits in favor of building longer-term next-generation markets. Sierra and a few others are, in effect, attempting to seed the market with CD-type games.

The recent Summer Consumer Electronics Show (CES) in Chicago featured opening salvos from several software companies and at least one major hardware company.

As mentioned, Sierra is taking the most aggressive approach. Sierra's public relations director, Kirk Green, demonstrated for our editors portions of what will be Sierra's first CD-ROM releases: a wonderfully enhanced re-introduction of *Mixed-Up Mother Goose*, and the eagerly anticipated *King's Quest V*, the next step in the mega-hit *King's Quest* series of graphics adventures.

The *Mother Goose* preview was one of the most delightful demos we've ever seen. The game combines 256-color high-resolution background paintings with charming digitized voices, animation, and a beautiful soundtrack. There are ten hours of voices on the CD version of the game — and that requires a lot of disc space.

King's Quest V will contain over ten megabytes of game data, 256-color VGA graphics, an original soundtrack, digitized voices, and Sierra's new "cinemagraphic" animation technology. The thousands of *King's Quest* fans who have followed the adventures of King Graham for years are sure to be delighted with either the CD-ROM or regular MS-DOS versions of the game. (The floppy disk version won't have the digitized voices and sounds.)

But Sierra isn't stopping with games. To seed the mar-

ket further the company is working out an arrangement in which they will offer both CD-ROM games, a CD-ROM player, a digital audio converter, and a popular sound enhancer card with software — all for under a thousand dollars. Sierra probably won't make much money from that kind of pricing, but they see it as a part of their investment in the future of computer gaming.

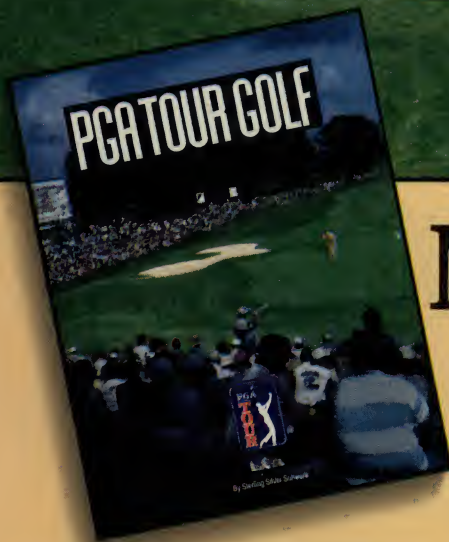
Two other companies, Access Software and The Software Toolworks, are also offering CD-ROM game packs. Access is putting its VGA games *Crime Wave*, *Mean Streets*, *World Class Leaderboard*, *Famous Courses 1, 2, and 3*, and *Echelon* on one CD-ROM Collector's Edition disc. Like Sierra, Access doesn't expect to make a lot of money from its first CD venture, but they do mean to show their intent to promote the market.

The same can be said for The Software Toolworks, which is selling *The Software Toolworks CD Game Pack*, a collection of five popular games: *The Chessmaster 2000*, *Life & Death*, *Gin King/Cribbage King*, *Beyond the Black Hole*, and *Bruce Lee Lives*.

Much more will be happening with CDs this fall and early next year. *Game Player's PC Strategy Guide* will be following all of the developments and reporting on the new products that are headed your way.

We'll have much more coverage of the new games introduced at CES in the next issue.

Selby Bateman
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BLACKJACK

Few things are more tempting than make-believe gambling. People who would never drop a quarter in a real slot machine find themselves wagering \$500,000 on the roll of computer dice without batting an eye. All the compulsion; none of the risk.

What these would-be high rollers usually discover is that gambling is a highly developed skill. Successful gamblers know almost as much math as an M.I.T. graduate. That explains why *MicroAce's Blackjack* comes with an 86-page instruction manual.

Those who play *Blackjack* shouldn't just be interested in a few quick hands of twenty-one. They should truly be interested in the tactics involved. You can choose beginner or advanced skill levels, and play with multiple decks or a single one. Using the game manual and the pull-down strategy tables,

you learn when to double down, when to hit a hard hand, when to split, and when to surrender. And, though it's frowned on in Vegas, you learn to count cards so you'll know the chances of that last ace being in your hand.

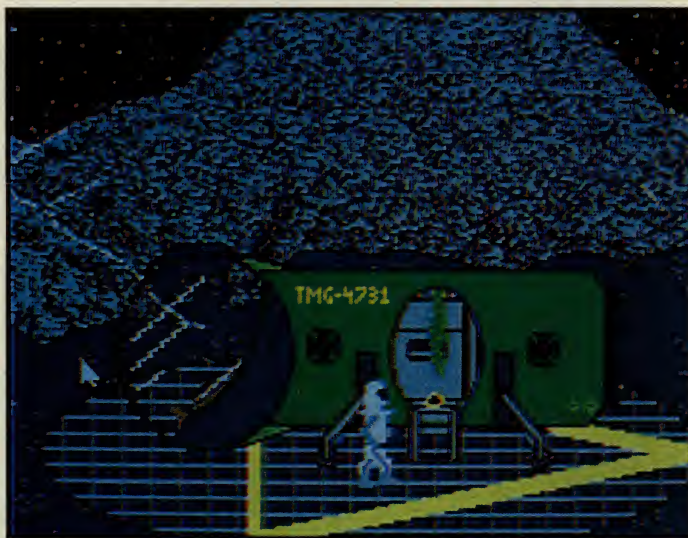
By referring to the manual, you can bet according to the dealer's probabilities. For example, if the dealer is showing a six, there's a 41 percent chance that he'll end up with 18 or more, but a 42 percent chance that he'll go bust. Finally, after each game you receive statistics on your play, complete with the decision errors you made. There's no excuse for not playing better next time.

After a few rounds with *Blackjack*, you may not be ready for Atlantic City yet, but you should be able to bet for more than matchsticks in the comfort of your home.



EARTHRISE

Did you hear him correctly? Of course, you were still half asleep when the guild chairman called, but you could have sworn he mentioned something about an imminent collision between Terra (Earth) and the mining asteroid Solus. As the top troubleshooter for the Terran Mining Guild, you



usually get the toughest assignments, but this job may even be out of your league.

If you're a fan of Roger Wilco, star of those *Sierra Space Quest* adventures, you might want to give *Earthrise*, by *Interstel*, a look. You'll certainly get a feeling of *deja vu* as you look at the game. The interface, design, tongue-in-cheek humor ... it's all in this game, too.

As the guild's top investigator, you must travel to the asteroid to search the myriad rooms and passageways for a way to restore power and control to Solus, and thus avert disaster for Terra.

Since points are awarded for performing certain actions or acquiring certain items, you get a rough idea of your progress. The asteroid is out of control because strange creatures have decimated the crew. Part of your problem, then, is to figure out how to deal with these creatures. They may block your path to areas essential to your assignment, but, in the best tradition of this genre, the solutions are usually far from straightforward.

Though there are no breakthroughs in either its graphics or interface, *Earthrise* is both enjoyable and absorbing.

HARMONY

Has death and destruction in computer games got you down? Is taking a few moments to relax with an action adventure becoming more like watching the news on TV? Have the arcade games you've brought home left you tied in more knots than when you started?

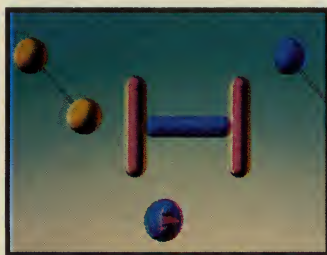
Accolade has written a prescription for the antidote to your case of chronic gamers' complaint.

Harmony seeks to be a soothing balm on the computer game player's psyche, and, to a large extent, it succeeds. While other games may reward you for violent actions, *Harmony* asks you to restore the universe to its natural balance.

You are a ball, gently floating in ether. Using the keyboard or a joystick, you must (well, "must" may be too strong a word; after all, we wouldn't want to pressure you, would we?) gently push balls of like color into harmonious union. This is easy enough as long as you're in the Mantra mode of play because there's no time limit or pressure to accomplish

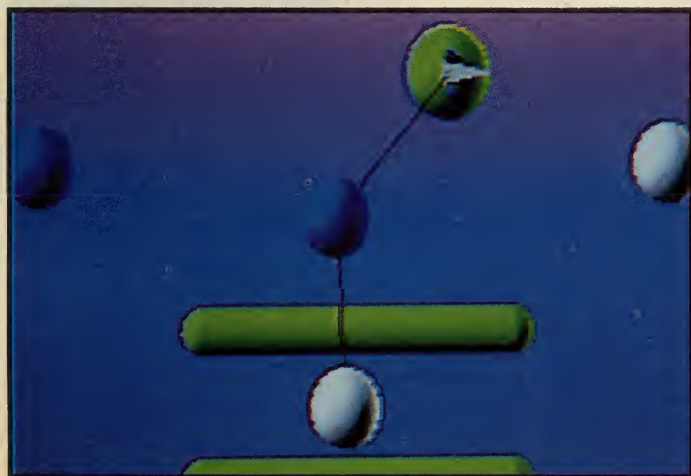
the task.

The normal play mode, however, seems to belie the stated intention of the game. Here you have to bring the balls together before they explode under tremendous internal tension. When the balls explode, they fragment into smaller balls, which can grow and, in turn, explode as well. If you can scoop up the smaller



balls before they grow, fine. But as the levels progress, you'll find this increasingly difficult.

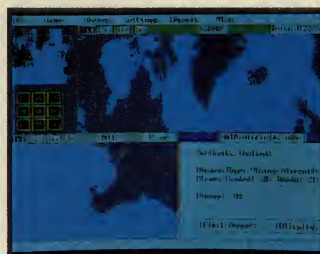
So does *Harmony* bring harmony to your life? That depends a lot on how you define the word, and in what mode you play the game. If nothing else, it's a beautiful game to look at, and the quiet contemplation of beauty can be a soothing pursuit in itself.



HARPOON BATTLESET 2: NORTH ATLANTIC CONVOY

Armchair admirals who have fallen under the spell of **Three-Sixty's** *Harpoon* will surely want to add this vast new battleset to their game collection, for it simulates the most crucial naval campaign of any hypothetical showdown between NATO and the Warsaw Pact.

However improbable such an event may now seem, changed conditions in the real world have not invalidated the

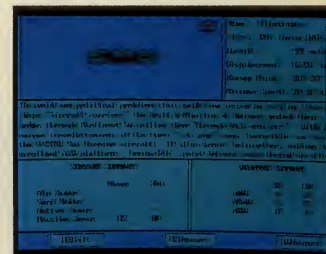


fascination and high drama of such a "Third Battle of the Atlantic" scenario. Consider the stakes: 90 percent of NATO's resupply and reinforcements would have to travel by sea. The Red Navy would, of course, do everything in its considerable power to choke off this vital traffic, as well as wreak whatever havoc it could along the vulnerable east coast of the U.S.

In the *North Atlantic Convoy* battleset, you can take command of either side and call up a wide variety of actions. As the NATO commander, you're stretched thin from the start in many scenarios, even though you may have Spanish, French, and British units as well as American. As the Soviet commander, you must strike hard and ruthlessly, trying to inflict massive damage early in the conflict while the Allies are off-balance.

As the manufacturer points out, some of the options open to you in these scenarios represent strategies that have never been tested in battle or in previous computer simulations. And obviously no one has ever tried to resupply a big land force by sea under the conditions of modern naval warfare. You start with a lot of sound doctrine that was perfected during two World Wars and countless training exercises, but at some point you'll probably have to start writing the book on your own. Rarely has a wargame simulation offered its players that kind of scope.

It is absolutely necessary to be familiar with the basic *Harpoon* system before attempting any of the battles in this module (you should be running *Harpoon 1.1*, in fact), and the



North Atlantic set must be loaded directly into an existing *Harpoon* directory.

Once you've added this battleset to *Harpoon*, you'll have enough contemporary naval action for hundreds of hours of play. It may have taken *Harpoon* a legendarily long time to make it to the marketplace, but nearly everyone who's played it agrees that this simulation was worth the wait.

HONG KONG MAHJONG

If you think you're ready to play **Nine Dragons Software's** *Hong Kong Mahjong* after a few sessions of *Shanghai*, think again. *Shanghai*, while a great game for one or two players, bears only a superficial resemblance to this version of Mahjong. Both are based on the ancient Chinese tile-matching game, but the Hong Kong version allows gambling, which was frowned on by the Chinese.

The same tiles are used in both games. The tiles are divided into suits — bamboo, balls, winds, dragons, characters, and flowers. Your goal is to collect 13 tiles with which a 14th tile would result in four sets of suits and a pair.

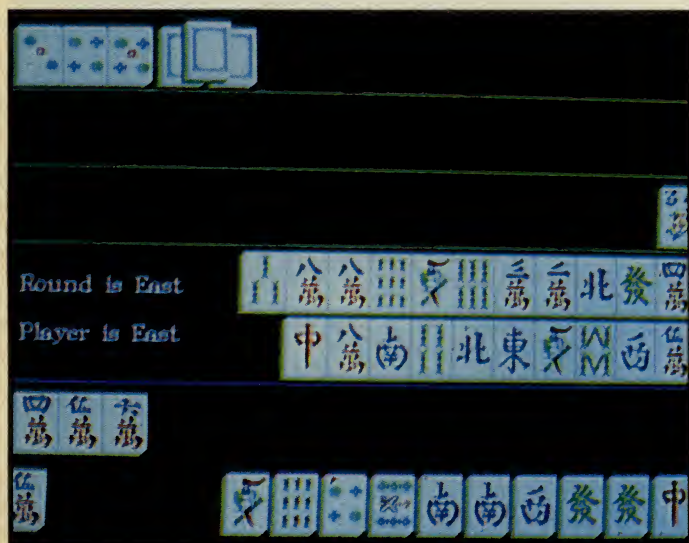
Seats are designated as East, South, West, and North. In a four-round game, each player rotates through being in the seat corresponding to each wind. The player in the East chair begins the game, and

once he loses, the winds rotate. A complete round lasts a minimum of 16 hands.

Mahjong proceeds until a tile is thrown which one of the players can match with a pair or set in his or her own hand. Those tiles are then laid down on the table, and play continues.

The game may seem complicated, but it is surprisingly easy to grasp — though, again, not as easy as *Shanghai*. Simply adding three other players makes the game more competitive, and makes strategy an important element.

A lot of care has been taken to give *Hong Kong Mahjong* a rich look. It is one of the few games available in a 640x400x256 super VGA mode which doesn't require special VGA cards, as well as a 640x480x256 mode, which is a generally richer-looking VGA with more 3-D effects.



NORTH AND SOUTH

The cartoon-like cover of this new **Data East** game is a reliable measure of the game itself. To cover all their bases, prominent disclaimers in the manual warn you explicitly *not* to expect realism and historic accuracy.

It's a good thing, too, for this odd, ditzy, yet somehow endearing game reduces the



entire U.S. Civil War to a Warner Brothers cartoon — you expect at any moment to see Yosemite Sam, in full Rebel drag, waving his sabre and bellowing “Charrge the Varmints!”

Using a colorful strategic map, you shift army icons from one state or territory to another, trying to isolate, occupy, or conquer enemy real estate. When opposing armies move into the same territory, battles occur. Animated gun batteries, cavalry squadrons, and infantry move around via the keyboard, and shoot — ranged fire, in the case of the cannon — when you hit the space bar. Nice shellfire and cratering effects, vigorous cavalry charges, and varied terrain make these engagements lively affairs, in a style that might, to coin a phrase, be termed “tactical-arcade.”

Pure arcade action takes place when one side tries to wrest control of a fort or a

supply train and animated soldiers duke it out with fists and knives. It should be pointed out that the arcade sequences are optional. You can play a purely strategic game from the map, but if you opt against the arcade sequences, there's not much game left.

There's a fantasy railroad running in a complete circle around both combatants, and for some inexplicable reason, whenever the train goes between two cities, you get a safe full of animated money bags that turn into a fresh army. This makes it quite feasible for the hapless Confederates to win — as long as they don't let their part of the railroad get cut.

There are random setbacks (also optional) such as Indian raids, floods, and Mexican terrorists who pop up from their siestas occasionally to lob sputtering bombs into Texas.

The manual reads like it was translated from French by someone for whom neither

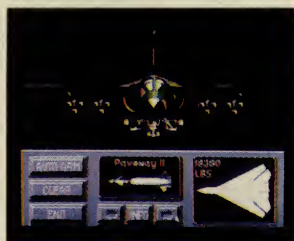


French nor English was a first language, and if you want to keep your sanity, *mute the soundtrack immediately!* But even though nothing about this goofy game makes much sense, it's still enjoyable to play, with extremely clever graphics.

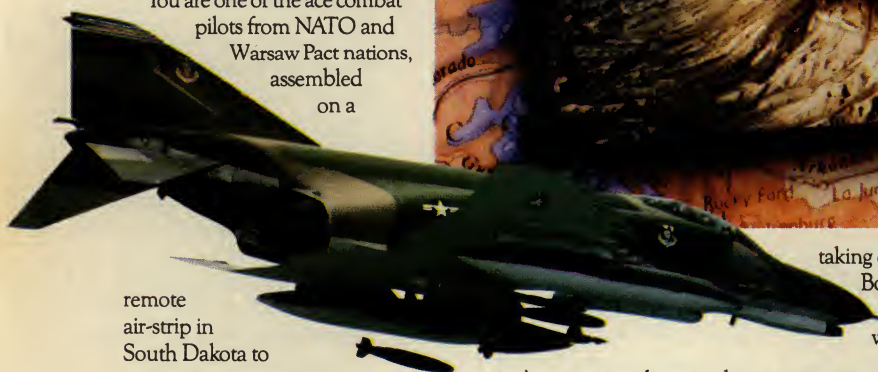
Drop Everything.



Bombs.
Mavericks
and Side-
winders.
Paveway II's,
JP 233's and
Durandals.
With *Strike Aces*,™
you'll drop potent
payloads from 6 of the world's
most powerful strike aircraft.



You are one of the ace combat
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Warsaw Pact nations,
assembled
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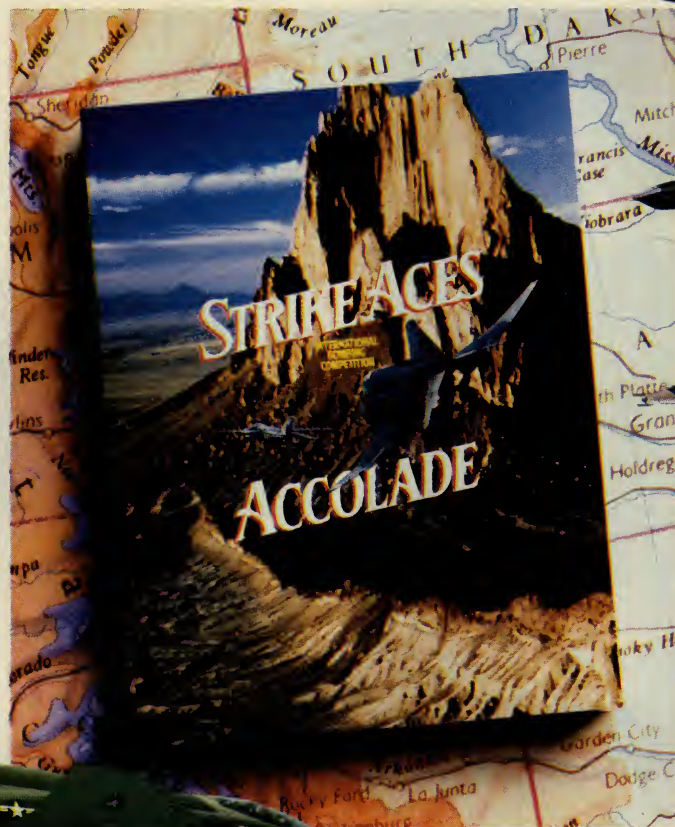
remote
air-strip in
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answer one question.

Who is the world's top bomb-
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The SAC bombing
competition will decide the issue.
Sixteen precise missions, or those
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Customize or auto-
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devastating warload. Pilot an
F-111F Aardvark, F-15 Strike Eagle,
F-4E Phantom, Panavia Tornado,
MiG 27 Flogger or a Saab AJ37
Viggen — taking out targets and



taking on bogeys.
Bogeys? You bet. Engage
in air-to-air combat
with seven deadly



Mid-air
refueling — essential for all strike air-
craft. Miss a drink, scrub a mission.



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SHUFFLEPUCK CAFE

Mists swirl as you throw open the swinging doors of the bar and step inside. The strange beings inside barely notice your entrance. A few look up momentarily, some buzzing or grunting a greeting in their native tongue. Most stay clustered in a crowd near the back of the room, pressing together, straining to look into the center of the game.

Above the alien murmuring of the spectators, you hear the sharp *smack* of an acrylic puck hitting a paddle. You

ment. In the training mode, you can customize your paddle by using options that let you change its size and the action it puts on the puck.

Actually, you play with two paddles — one when you hold your mouse button down, and the other when the button is up. Each paddle has different properties; one slows the puck down so that you can smack it with the second, more powerful paddle.

In the tournament mode, you won't have the luxury of



elbow your way through the crowd until you reach the nine players ringing the table.

Welcome to *Shufflepuck Cafe*, the galaxy's only remaining air hockey hang-out.

Broderbund's space-age version of air hockey, long available for the Macintosh, is now available for PC players. You can choose from nine opponents — each decidedly alien — and play a single training game or enter a tourna-

"fixing" your paddle. Every player uses the standard tournament paddle, so only your skills will see you through. Each of the nine opponents — from super-accurate Vinnie the Dweeb, a physics major at the University of Xtpl, to the voluptuous Princess Bejin, whose telekinetic serve is almost frightening — has an individual style of play, and each adapts his or her game to yours as the match progresses.

TEENAGE MUTANT NINJA TURTLES

They're a strange phenomenon that seems unstoppable. But after a day spent sleeping on Teenage Mutant Ninja Turtles sheets, eating Teenage Mutant Ninja Turtles cereal, wearing your Teenage Mutant Ninja Turtles underwear, playing with your Teenage Mutant Ninja Turtles action figures, watching the *Teenage Mutant Ninja Turtles* movie (for the umpteenth time), you just might want to sit down at your PC for a session of — what else? — *Teenage Mutant Ninja Turtles*.



The PC game is from Ultra, the same company that developed the heroes in a half shell for Nintendo. The storyline is the same, too: The turtles' human friend, April, is kidnapped by their worst enemy, the evil Shredder. He intends to brainwash April and recruit her for his army of Foot Clan Warriors.

You have to lead the turtles on several missions. First, you must rescue April. Then you have to locate Shredder's Life Transformer Gun so you can turn the turtles' mentor, Splinter, from a rat back into a human being. Finally, the turtles must defeat Shredder.

The six levels of arcade action take you from Green



wich Village to the Hudson River, to Wall Street and JFK International Airport, and from Shredder's Base in the South Bronx to the terrible Technodrome. Throughout the game, you also have to defuse bombs beneath the Hudson River, rescue any turtles who have been captured, and somehow defeat the Technodrome.

You have control over all four turtles — Donatello, Leonardo, Michelangelo, and Raphael — but you can only use one at a time. Each one has a different weapon: a bo for Donatello, a katana blade for Leonardo, nunchukus for Michelangelo, and a sai for Raphael.

Watch out for enemies! Shredder's not your only threat. You have to defeat the Fire Freak, Mouser, Mecaturtle, Bebop, Rocksteady, and hordes of Foot Clan soldiers before you meet your arch-enemy. Don't forget to collect ropes in order to travel from building to building in levels 3 and 4, and of course, don't neglect your turtles' tummies. You must find enough pizza to keep the brave amphibians' vitality high.

This fast-action game is sure to be popular, but it's only as good as your PC joystick.



The game is fantasy. The interface is magic.

Alone on a craggy hilltop, high above an island shrouded in perpetual mist, your quest begins. But tread gingerly, because while the world of *Loom*™ is breathtakingly beautiful, unspeakable danger awaits the unsuspecting.

Trepidation soon gives way to bravado as you peek inside abandoned tents in the village. Stumbling over a discarded weaver's distaff, you watch in wonder as it gradually glows and resonates with a sequence of musical notes. Tentatively at first, you point the staff and repeat the notes. After con-

siderable experimentation, you may discover the power to see in the dark. Or weave straw into gold. And eventually find the means to leave the island itself.

A fantastic odyssey ensues, as menacing water-spouts, merciless dragons and exotic cities draw you deeper and deeper into the fantasy. Armed with the distaff's magic power, you stride fearlessly across vast, cinematic landscapes.

Seeking the arcane knowledge possessed by the Great Guilds, accumulated and refined since the dawn of time.



Not all the Guilds welcome strangers.



A spell weaver's power is not for the sheepish.

Typing is banished from this kingdom.

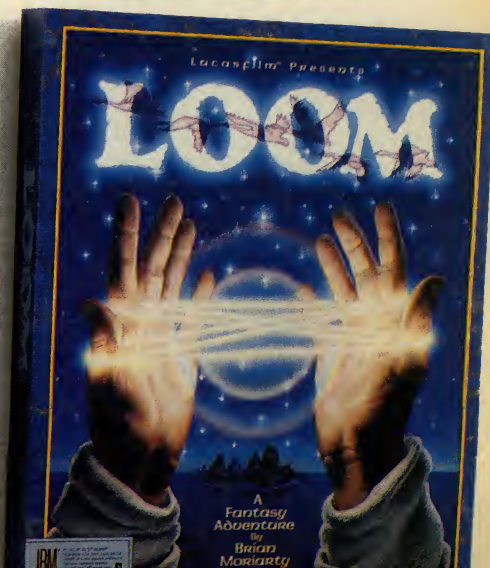
Loom is more than a masterpiece of fantasy storytelling. With *Loom*, Lucasfilm™ Games literally redefines the fantasy computer game experience. Simple point n' click actions move your character, select objects, and perform magic. No cumbersome keystrokes, text parsing, maze mapping, or inventory management intrude to break the spell.

We even transport you to the Age of the Great Guilds before you turn on the computer. With a lavishly produced, 30-minute drama on Dolby® Stereo audio cassette that's included with the game. Recorded by Lucasfilm's Academy Award-winning Sprocket Systems, it introduces the characters and sets the scene for the impending, epic struggle against imposing odds.

Then it's full immersion into *Loom*'s 3-Dimensional, scrolling panoramic landscape. Where detailed animation, high definition graphics, startling special effects and stirring musical score combine to create a total environment. Captivating you from the opening scene to the final climax.

And your quest for a truly magical fantasy adventure is finally realized.

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CENTURION



NEIL RANDALL

The Western world has seen many empires, but none as sweeping or as fascinating as that of ancient Rome. It's true that Britain's empire spanned more continents and hemispheres, and Hitler's empire occupied more territory, but Rome's lasted much longer than Hitler's and was much more unified than Victoria's. For half a millennium, Rome *was* Europe. In fact, Latin remained the official language of the West long after the empire collapsed.

Rome was no kind or

gentle nation, of course. With its slaves, torturers, and insane rulers, Rome was infamous for corruption and immorality. But its art, architecture, games, and military systems were all so enormously influential that today we look at Rome primarily from those perspectives.

Politics, games, and military systems provide the focus for **Electronic Arts'** new *Centurion* game. An easy-to-play but strongly detailed look at the rise (and possibly the fall) of Rome, *Centurion* begins in the

year 275 B.C. and continues until either Rome is conquered or you become Caesar.

Your goal is simple: You wish to rise from the lowly rank of officer to the ultimate rank of Caesar. In the process, of course, you must help the empire as well. Only by benefiting the empire can you rise in rank, and only by bringing all of Europe under your control can you attain the position of Caesar. Even then, your task is not complete.

You'll work your way up

through nine ranks: officer, centurion, tribune, legatus, general, praetor, consul, proconsul, and Caesar. At the lowest rank, you can control one legion (i.e., army) and no fleets. Two ranks later, as tribune, you can control three legions (which now can include cavalry) and one fleet. By the time you become general, you can have six legions and two fleets at your command; at the rank of consul you are capable of operating three fleets and ten legions, with the legions

now as proficient as extremely powerful consular armies.

Your rise in rank depends on your accomplishments in a number of areas — and many options are open to you from the beginning of the game. You can conquer territory by moving legions into non-Roman provinces and defeating their armies in battle or convincing them to surrender or swear allegiance to you. You can strengthen existing treaties by altering taxes and entertaining the natives. You can build an amphitheater in Rome. You can hold games and gladiatorial events in Rome and in the other territories.

In short, your success depends on your efforts in the battlefield, your diplomacy, your efficiency as an administrator, and — this is a vital part of the game — the way the populace perceives your actions as the upholder of Rome's honor.

Your social status is automatically lowered if you fail at a chariot race or gladiatorial event, let an alliance weaken, don't protect an ally from foreign attack, or lose a battle. You won't ever be demoted, but your well-planned route to becoming Caesar will certainly be slowed. And, at the advanced levels of the game, catching up again can be extremely time-consuming.

Four difficulty levels are available, ranging from "galley slave" through "emperor". If you wish — and this is a very nice touch — you can adjust the difficulty levels of different parts of the game individually. For instance, you can work at emperor level for land battles,

With the detailed graphic of Rome at the top of the screen, the game's main menu appears. From here you can build legions and fleets, or hold chariot races or gladiatorial combat.

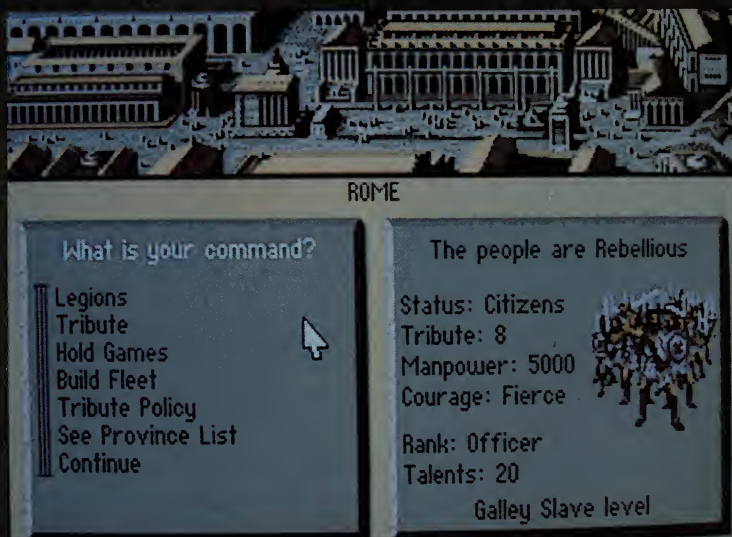
THE LEGENDS SAY Rome was planned by the gods themselves. After the fall of Troy it was the gods who led a band of Trojans to a promised land in the West. There, Romulus and Remus were born to a Vestal Virgin and nursed by a friendly she-wolf.

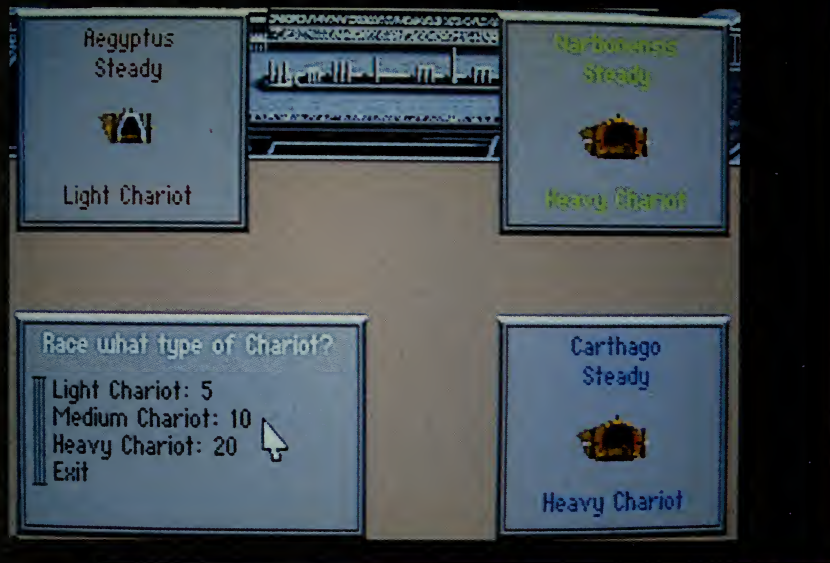
Upon reaching manhood, the twins founded Rome on the banks of the Tiber River. The city prospered and grew until one day the Romans reached out from their tiny domain with a great dream of glory.



The first screen of the game shows Romulus and Remus, the twins, and the she-wolf who raised them. This story tells the mythic founding of Rome.

As the game opens in 275 BC, one Roman legion waits for orders in the province of Italia. Three enemy fleets guard the Mediterranean.



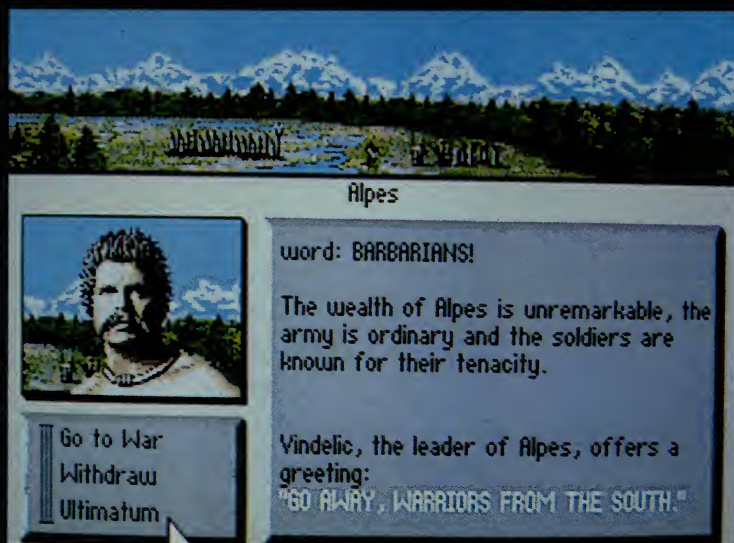


If you choose to hold a chariot race to quell your rebellious populace, you'll see this chariot selection screen. The medium chariot is more expensive than the light, but it's also more durable.



Before the chariot race begins, you find yourself inside the coliseum, standing before statues of the gods and goddesses. It's an imposing sight, but one you'll see again if you ever become Caesar.

Moving your only legion northwest into the Alps, you encounter the decidedly unfriendly Vendelic. You can try issuing an ultimatum, but you'll probably end up fighting.



senator level for chariot racing, legionnaire for naval battles, and galley slave for gladiatorial combat all at the same time. This is unquestionably a feature more games should employ, since it allows you to adjust the game's play to suit your preferences.

Graphically, *Centurion* is extremely strong. From the opening screen showing Rome's founders, Romulus and Remus, with their wolf mother to the different depictions of provinces to the screens introducing naval battles, chariot races, and gladiatorial combats, *Centurion* artist Jim Sachs (a renowned Amiga artist) demonstrates an excellent ability to provide a period feel for the game. The most spectacular graphics, however, are reserved for the battle scenes. Here, animated armies—both yours and the enemies—adopt and carry out various battle formations.

When you move a legion into an unconquered province, you first encounter that territory's leader (e.g. Vercingetorix of Gaul). You can attempt to ally with that province, or you can demand that it surrender. If the province doesn't capitulate (which is usually the case), you must either withdraw your legion or enter into battle.

CENTURION

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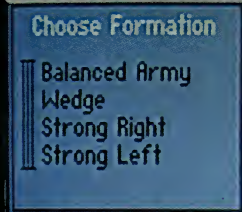
Romans Aren't Fought in a Day

If you decide to fight, you must first select a formation for your army. You can choose from among four formations: balanced, wedge, strong right, or strong left. Each formation offers different tactical options, one of which you choose next. In balanced formation, you can opt for Scipio's defense (which enabled the general to defeat Hannibal), drive a wedge, out-flank, or stand fast.

With wedge formation you can use the Cannae tactic (from the 216 BC battle that Hannibal won), drive a wedge, or form a line. By strengthening one flank or the other, you can sweep right or left or you can mass your troops in the middle. Once you choose your tactic, the music sounds, and troops from each side move forward and execute their respective tactical maneuvers.

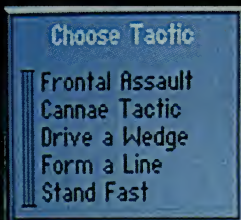
Once battle has begun, you can sit back and watch. If all goes well, there's no point in intervening. But if you decide that a different strategy is called for, you can change the course of the battle by making some choices. Stop the battle by going to the Pause menu. Then click on any individual cohort (fighting unit), and you can order it to move to another area of the battlefield or melee with the closest enemy unit. This is only possible, however, if that cohort is within command range of the leader (i.e., you), represented by a lone figure on horseback.

If the enemy is retreating, you can prevent their escape by commanding the entire le-



Before the battle begins, you must choose a formation. Against non-cavalry armies, a wedge is often very effective.

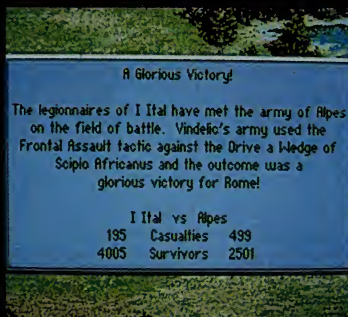
18



Next, you must select an appropriate tactic. Why not drive a wedge and test your enemy's resilience?



With the barbarian leader down, the enemy army won't stick around for long. This might be a good time to release the legion — but wait until the enemy retreat has begun.



With only 195 casualties, you have driven the Alpine hordes from the field. This will certainly help your reputation.

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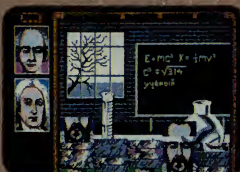
You'll recognize the concept of FACES soon enough. Stack the falling blocks of face segments of the famous and not-so-famous in the proper order

to make complete faces. Swap the pieces, flip them, and drop them into place.

"To rotate Shakespeare's nose or not to rotate Shakespeare's nose, that is the question."



Make like a mad scientist... build your own Frankenstein.



Discover the shape of things to come in the world of science.



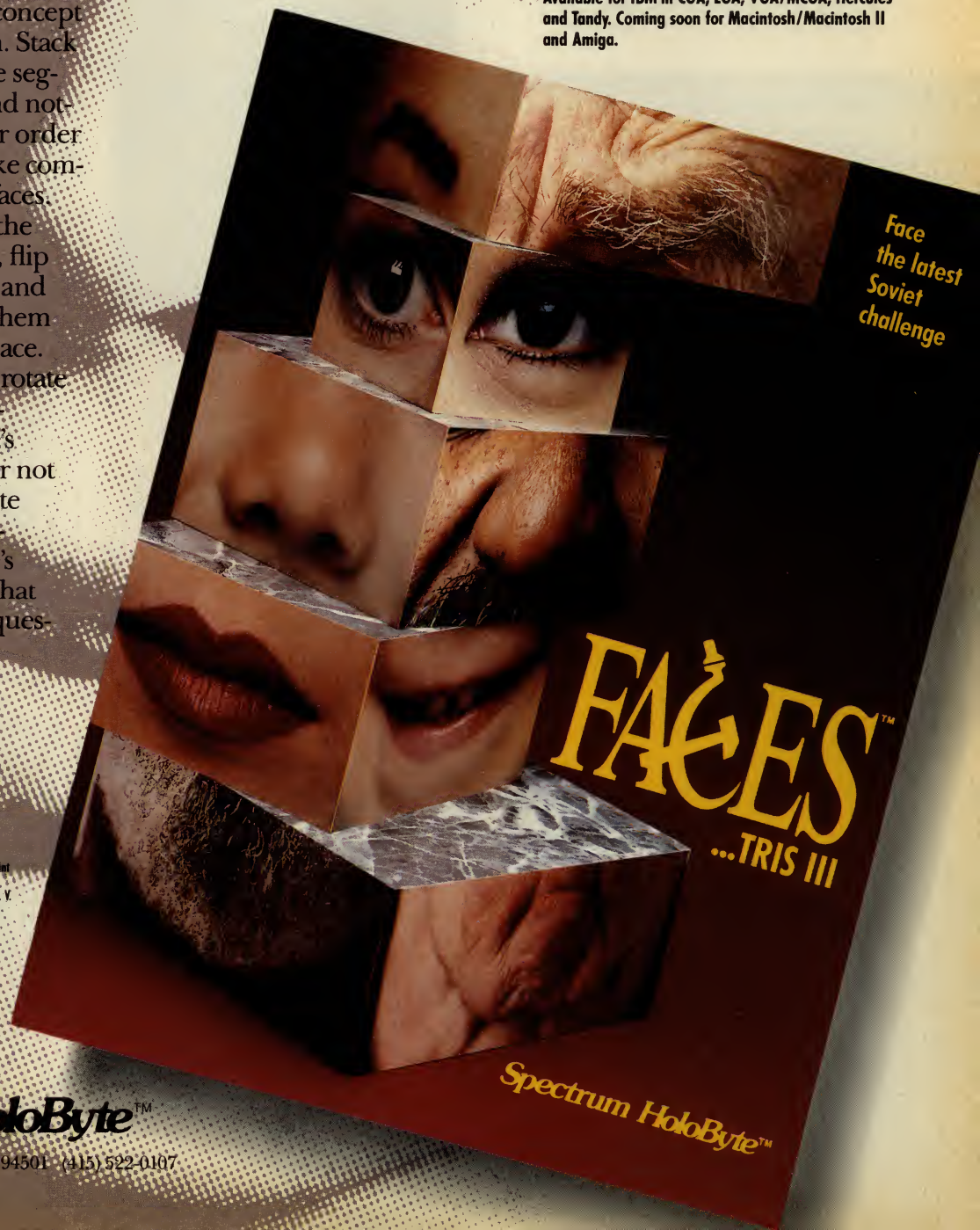
Recreate the great masterpieces, and the great masters—from American Gothic to Vincent Van Gogh.

And picture this if you will—Joan of Arc's nose on Napoleon's mouth. What a combination!

Rack up the score by making perfect or mixed faces, but remember there are no points for "double chins" in this game! For an unparalleled, fun time,

play FACES in the head-to-head mode. When you create a perfect face, your opponent gets a stack of face pieces dumped onto his screen. It's funny, it's obsessive, and you'll keep coming back for more of this soon-to-be-unforgettable FACES from the Soviet Union!

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ROME

What type of Legion?

Infantry Legion: 20
Cavalry Legion: 30
Consular Army: 60
None

The people are Restless

Status: Citizens
Tribute: 8
Manpower: 5350
Courage: Fierce

Rank: Centurion
Talents: 17

Galley Slave level



With the second conquest, you've gained the rank of centurion. Now it's time to build a second legion. Later you can command cavalry and consular legions, but for now your only choice is an infantry legion.

Province List				
	Status	Morale	Manpower	Last Tax
Alpes	Ally	Content	2990	1
Asia	Occupied	Restless	1170	1
Dacia	Ally	Restless	3175	5
Dalmatia	Ally	Angry	2092	6
Gaul	Citizens	Content	2200	4
Germania	Occupied	Content	3380	1
Hispania	Occupied	Rebellious	2685	3
Italia	Citizens	Angry	2975	3
Macedonia	Occupied	Content	1688	1
Narbonensis	Ally	Restless	3000	1
Sarmatia	Colony	Restless	750	1
Thracia	Occupied	Content	1641	1

Click to continue

Continue

Talents: 55

Galley Slave level

As this province list shows, the empire is strong but the people aren't altogether happy. It's time for some games and some military aid—but don't forget that expansion is still your primary concern.



By 253 BC, you have four legions and several provinces at your command. But an enemy army has appeared in Sardinia, and your fleets in the western Mediterranean don't look very powerful.



Aegyptus

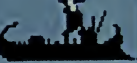
What type of ships?

Triremes:
0 ships

Quinqueremes:
0 ships

Galleons:
0 ships

Continue



Fleet III

The people are Angry

Status: Occupied
Tribute: 3
Manpower: 200
Courage: Good

Rank: Proconsul
Talents: 39

Galley Slave level



With the beautiful depiction of ancient Egypt as your backdrop, you can explore the possibility of building an eastern Mediterranean fleet—but 39 talents won't go very far when financing your latest armada.

gion into melee. Use this option carefully, though, because destroying the enemy means you'll have greater trouble recruiting soldiers from that province (they're dead, after all). For the most part, it's best just to let them go.

Battles in *Centurion* are colorful and fascinating. Players of miniatures wargames will immediately recognize that what happens on the battlefield is essentially an animated version of their own colorful hobby. The only problem with the combat system is that you must select your formation and tactics before you actually see the enemy army on the screen.

You're given some information about your enemies when you first enter the province, but only about their size and fighting zeal, not about the proportions of cavalry to infantry or the actual number of troops. This strange design decision makes surprise possible, but it also means that "stand fast" is almost always the recommended tactic to choose. This aspect of *Centurion* can clearly stand revision.

One addition to the *Centurion* battle system would go far to extend the game's realism. Only two battlefields are depicted: a grassy area and a desert area. It would be nice if the defender were able to choose the type of terrain on which to fight by offering regions of hills, open ground, rivers, or even mountains (where applicable). Not only would such a system increase the visual appeal of the battles even further, it would also require greater thought about which formation and tactic to use.

Naval battles are less involved, and in fact are on par with gladiatorial combat and chariot racing as diversionary arcade exercises. Your entire fleet doesn't appear on the map; instead, only your flagship shows, fighting only the enemy flagship. You can steer toward the enemy vessel and ram it, board it, or simply fire a catapult. The idea is to sink the enemy flagship or lower its crew's morale so you can board it and defeat its sailors in hand-to-hand combat.

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Let the Games Begin

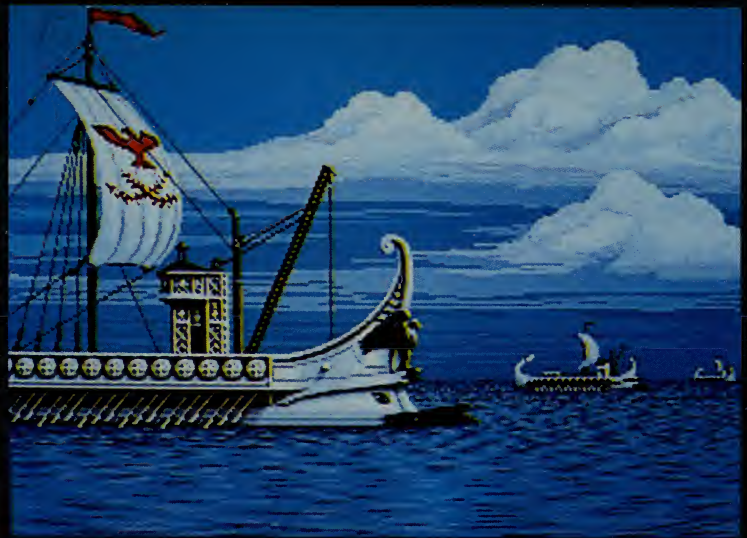
Chariot races and gladiator combat both contain a great deal of historical flavor. Before racing your chariot, you must choose between light, medium, or heavy chariots. Heavier chariots are more expensive, but they give you an advantage over lighter vehicles. You can then bet money on a race or engage in skulduggery. The latter involves bribing an opponent, hiring a physician to drug your horse, or invoking the help of the gods. Once on the track, you can whip your horses or even your opponent. The trick is to stay on your chariot until the end of the race, and, obviously, to place first.

The citizens of Rome demand frequent gladiator shows. Your goal here is to bet on the winning gladiator — a palatable proposition, since you control the movements of the fighter on whom you've wagered. You can choose to pit your gladiator against an equal or better gladiator, or against a dangerous animal. Once the battle is over, you must decide whether to let the fallen fighter live (thumbs up) or die (thumbs down). Your decision determines the general level of citizen contentment.

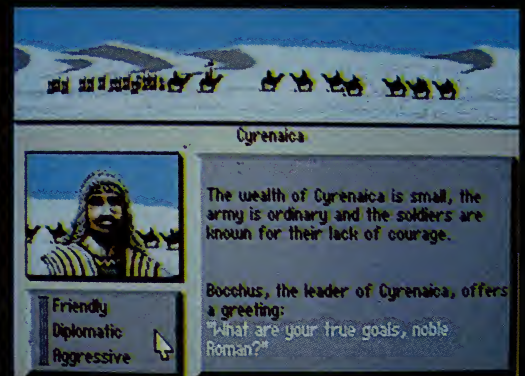
All of these features, however—land battle, naval battle, chariot races, and gladiatorial combat—are sideshows to the strategic game. At the beginning of every turn, you see a map of Europe with your legions and fleets (and those of your enemies) displayed as icons. By clicking on a province you control, you bring up a menu, from which you can select Legions, Plunder, Tribute, Hold Games, Build Fleet, See Province List, or a combination of any or all of the choices.

By selecting Legions, you can upgrade or strengthen existing legions or build new ones. You can also move legions from one province to another. By choosing Build Fleets, you can add triremes (cheap), quinquiremes (not-so-cheap), or

The gorgeous naval battle screen gives an authentic flavor to the game. Notice the Roman eagle on the mainsail.

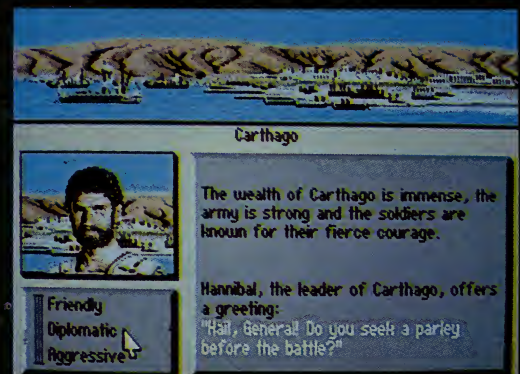


Each naval battle features only two ships. Fire your catapults, but ram your opponent if you must. You can also board his ship.



Now that you're getting more powerful, the leaders of other provinces are starting to listen to you. Bocchus of Cyrenaica seems willing to listen, so why fight if you don't have to?

If you know Roman history at all, you'll recognize this guy. Hannibal of Carthage has elephants at his command and his army is very, very strong. Try diplomacy first, but don't expect quick results.



On the fields of Carthage, you and Hannibal join battle. Elephants lead the way and your troops don't like standing up to them. Be careful, and avoid combat where you can.

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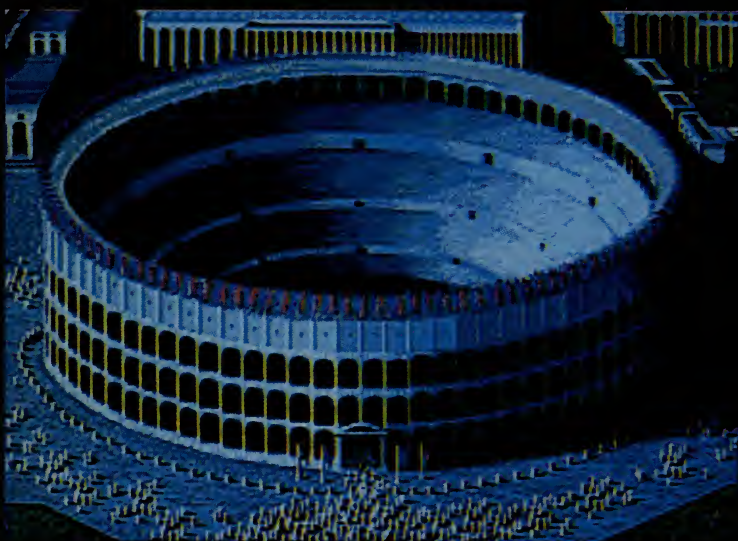
This is the same battle with Hannibal, but now two things have changed. You've selected the highest difficulty level, and you're using a different battle formation.



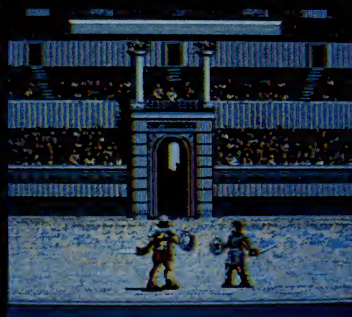
This time, your cohorts have begun to panic at the mere sight of the charging elephants. At the emperor difficulty level (and history aside), the battle with Carthage won't be easily won.



The elephants have crashed through the line, but now they're turning. With luck, they'll charge back into the Carthaginian lines. But don't count on it.



More detailed graphics show the beauty of the ancient amphitheater. The gladiatorial games are held inside.



If you defeat the warrior on the left, you'll have to decide whether he deserves to live or die. It's not an easy decision, but your popularity rides on it.

galleons (pricey) to your fleet; you need fleets to transport your legions to islands such as Sardinia or Britannia. If you choose to hold games, you'll enter the chariot race or gladiatorial combat sections of the game, while Tribute lets you raise or lower taxes. If you plunder, you'll gain a lot of money, but you'll probably annoy the natives.

This menu-driven strategy system is surprisingly easy to use. The instruction manual helps you get started, but with a few exceptions (building an adequate navy for large legions, or figuring out the mechanics of naval combat and coliseum games) you probably won't need it. Just take your mouse or keyboard and start selecting the items that seem logical.

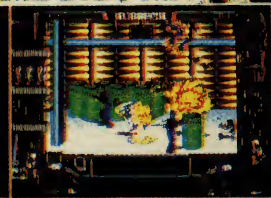
Build legions and move them, and select the battle formations and tactics that seem worthwhile. If you keep your first game at the galley slave level, you won't even lose many combats. By the time you're ready to increase your difficulty levels, you'll probably want to read the manual — if only to see how much else you can do.

Centurion is a highly capable game merging politics and military strategy. Its battlefield graphics and mechanics are nothing less than inspired, and are continually a joy to watch. As a political game it suffers from allowing only one player, and by making negotiation with foreign provinces almost pointless. It's also unfortunate that the southern Gallic tribe is (ahistorically) depicted as near-Neanderthals, though the rest of the provinces are fine (if occasionally a bit anachronistic).

But conquering Europa is a fascinating challenge, as real Roman generals and consuls also apparently considered it. With its epic flavor and its excellent graphics and interface, *Centurion* brings ancient Rome very clearly to life.

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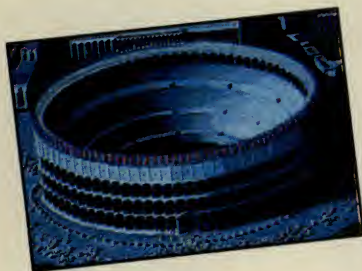
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Centurion's Kellyn Beck: Lights! Camera! Action!

Similar to a motion picture director, *Centurion* game designer Kellyn Beck is always looking for new angles from which his games can be viewed and played.

"We try to move things around so that you see them from different angles, and that's where we get the three-dimensional feel in a two-dimensional medium," says Beck, who served as project director for Electronic Arts' *Centurion* and co-designed the game with the programming team of Evan and Nicky Robinson.



This cinematic approach is a hallmark of Beck's work, exemplified in his direction and design of such Cinemaware games as *Defender of the Crown*, *S.D.I.*, and *Rocket Ranger*. Now, in the just-released *Centurion*, Beck and his team have continued to move toward the look and feel of cinema.

That approach includes sound and music as well as graphics. Award-winning film composer John Newton composed the music for *Centurion*. "We studied music from films like *Ben Hur*, *Spartacus*, and *Quo Vadis*, films about ancient Rome," Beck says, "and tried to evoke some of the feelings you got from those films." On the visual front, artist Jim Sachs, who worked with Beck on *Defender of the Crown*, led a team of artists in creating the superb *Centurion* graphics.



With a background in film documentaries and television news features, Beck brings a strong visual sense to his games. His commitment to solid background research is just as powerful. Beck spent three years researching *Centurion*, including travel to Rome where he studied the Forum, the Coliseum, and the Circus Maximus. He spent additional time analyzing the military strategies and tactics of the Romans as well as such enemies as the Carthaginians and Egyptians, among others.

Strongly influenced by game designers Chris Crawford and Dan Bunten, Beck has been an avid computer game player since he first bought an Atari 400 computer in 1980 and got hooked on *Star Raiders* and Crawford's *Eastern Front*. It wasn't long before Beck himself began thinking about game design. "I got the 'bug' to see if I could do something as good as what other people were doing," he says.

Beck recently formed a partnership with veteran game

designer Doug Sharp, author of *Chipwits* and *King of Chicago*, in a new company called EARTHLING that's located in Portland, Oregon.

"We have a lot of plans, and as we expand our group we'd like to do different things—some games like I've done in the past, interactive dramas with actors, and some videogames," says Beck. Although he won't reveal his current project, it's clear that he continues to push his game designs even further. "All I



can say is that we're working on a game that uses actors and real locations. We're actually bringing characters to life in a computer game. It's very exciting."

GP

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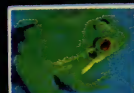
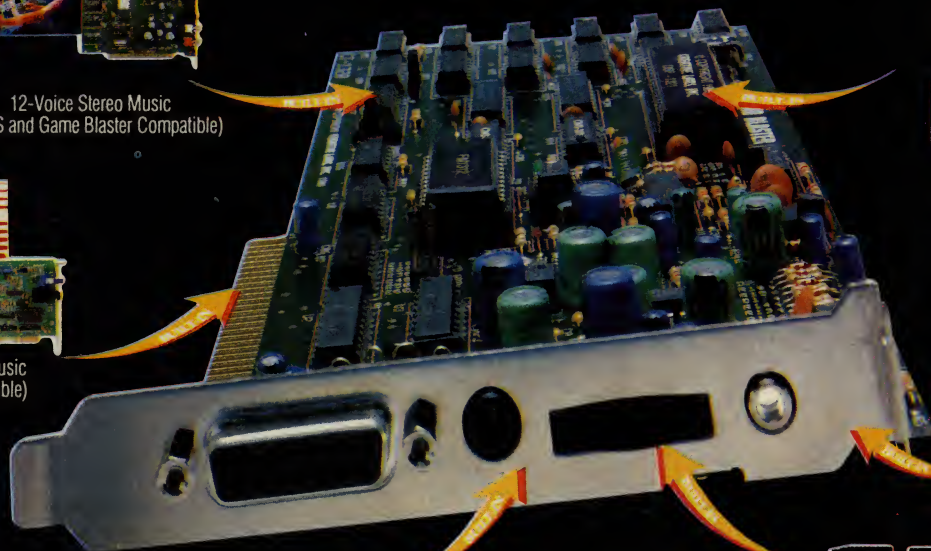
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Handicapping the New Golf Simulations:

Are they up to...

PAR?



Neil Randall

28

Melbourne House has just released *Greg Norman's Shark Attack*, which the company bills as "the ultimate golf simulator." Right behind this fine new game comes Electronic Arts' *PGA Tour Golf*, calling itself "the best computerized simulation of what's been called 'the greatest sport man has ever devised'." As if that weren't enough, Accolade has tossed its new *Jack Nicklaus' Unlimited Golf & Course Design* into the fray, claiming that "this new simulation captures the complete golf experience." How to choose?

All three of these games have lots to offer the avid electronic golfer, and all three are significant advances over what was once considered state of the art. Those who spend their weekends on real golf courses aren't likely to be disappointed by any of these offerings, and beginners are sure to gain sound knowledge about the finer points of the game. None of them lets you slam your club to the ground in disgust, but at Greg Norman's or Jack Nicklaus' level that isn't supposed to happen anyway.

Actually, the fact that you

can play at such an advanced level might well be the real attraction of these games. Most people can head out to the local golf course and knock some balls into the trees, the water, or the sand, then ten-putt their way into the folklore of that course. But few of us can consistently hit drives of over 250 yards, or chip from a bunker to within five feet of the pin. To find out what it's like to do these things, you have three choices: pay for years of lessons, watch the PGA tournaments on television, or play computer golf. The first is

expensive, and the second is passive. Only the third gives you a chance at real participation.

What makes golf a good game for computers? Easy: It's a natural solitaire game. Out on the course, your main opponent is yourself, whether you're playing in a tournament or a foursome. No other player on the course can affect the way you hit the ball, nor where you place it on the course. Golf is, above all, a personal game, and it is therefore suited to — and addictive on — your personal computer.

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Greg Norman's Shark Attack: Realistic, Yet Playable



In many ways, *Greg Norman's Shark Attack* is a most unusual computer golf game. Yet, right from the start, its goal is obvious: to provide the most realistic game available, but to keep that realism solidly within playable limits. As a result, *Shark Attack* concentrates on the tee, fairway, and bunker games rather than the greens game, and this is a welcome approach.

In most computer golf games, getting to the green is the easy part. Putting, however, is hard and frustrating. *Norman* reverses that. You must select your club carefully, adjust your swing arc and spin, get different views of the course by walking around, and so on. Then it's a matter of hitting the ball where you want, taking as few shots as possible to reach the green. Putting itself is fairly easy.

Norman comes with a database of ten players.

Among them is Greg Norman himself, rated in several areas. You can add players to this database (up to 50), providing factors for experience, stance, grip, swing, and fitness. You can also adjust handicaps to keep things as competitive as possible.

You begin by choosing among several kinds of games. *Practice* lets you spend time developing your drives, approaches, chips, and putts. *Strokeplay* is the format we're all used to from watching golf on TV, with you competing against at least one other player for lowest shot total. *Matchplay* is for two or four players, the winner being the player who wins the most holes, not who takes the fewest strokes. Finally, three four-player games are available:

fourball, foursome, and greensome. In other words, this is far from just standard tournament golf.

You can also enable or disable wind effects, weather effects, and the effects of spin on the ball, and you can select whether or not to use a caddy (who helps you choose club and placement).

Along the top of the *Norman* screen are the Club, Swing, Map, Info, Play, Sound, and Exit menus. When you choose a club, you are shown a graphic of that club beside a ball, as well as the maximum distance for the club. Choose Map for an overhead view of the course, on which you can adjust your facing. Click on the Play menu, and a graphic of Greg Norman appears, ready to play a hole for you. Taking a shot is a matter of aiming, then setting power and aligning the club to the ball. On a putt you don't have to worry

about alignment, but you must still select power.

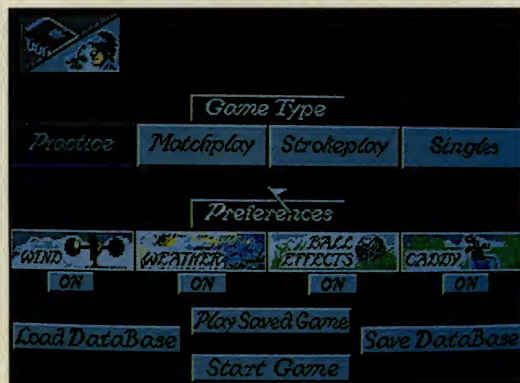
Depicting greens has always been a problem in golf games. *Shark Attack* gets around this by offering a 3-D view of the green from where you stand. While it's not especially detailed, it clearly shows the green's slope. For the most part, that's all you need.

The graphics are of two calibers. The course is rendered well, with realistic height-lines and vegetation, but at times individual features are a bit hard to distinguish. The golfer animation, however, is excellent, and by itself is almost worth the price of the game.



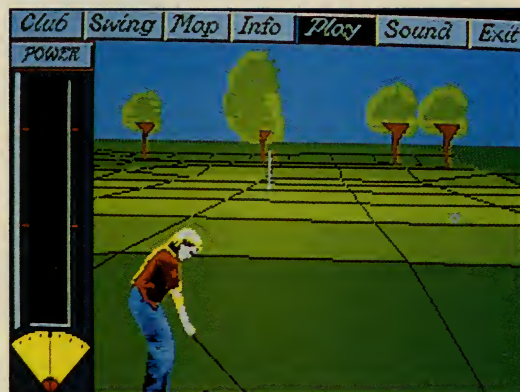
At the beginning of each hole in *Greg Norman's Shark Attack*, the info screen appears. Weather conditions, par, suggested club, and other options appear.

The preference screen lets you select precisely the kind of game you wish to play. By leaving all effects on, you have a very realistic simulation.



By altering your swing, you control the flight of the ball. This feature of the game takes some practice, but the results are worth it.

Near the green, you select your iron and get ready to swing. The power bars at the side control the swing.



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For the TV Generation: PGA Tour Golf



PGA Tour Golf is superb in almost all respects. It is extremely easy to learn and it plays quickly and forgivingly. This is golf for those accustomed to watching golf on television, and as such could easily become the most popular golf game of all.

The basis of *PGA Tour Golf* is the tournament. In each tournament, you are one of many golfers. You control one player and the computer keeps track of the rest. Often, an information bulletin appears, describing how a player on another hole has just eagled, birdied, or even bogeyed, and giving that player's current position on the leader board. Obviously, you're only concerned with those near the top, so the computer only reports on frontrunners.

You begin *PGA Tour Golf* in the pro shop. If you have a game saved, you can load it and begin playing immedi-

ately. If not, you can choose from a wealth of options to get your game started.

From the Play menu, you choose between a practice round or a full tournament. Alternatively, you can get some practice on the driving range or the putting green. In any event, you have to choose from computer or human players, add your name to the list of saved players, decide between professional or amateur tees, and select which clubs you want to keep with you.

The View menu shows your scorecard and the leader board, as well as tournament results when the tourney is over. From the Stats menu you get details about any saved player, including longest drive, driving accuracy, aver-

age number of putts per green, percentage of holes where par was beaten, earnings, and best 18 holes. Similar stats are available for each tournament.

From the Options menu you can select automatic overhead views of each hole, a view of the ball's lie on the course (i.e., whether or not it's buried in the rough or sitting deep in a sandtrap), an automatic 3-D view of each green (absolutely essential), and a superb overhead pan of the entire hole. Each of these views gives you information that's extremely useful in planning your shots, but they do add a bit of time to the game.

Excellent though these features are, where *PGA Tour Golf* shines is in its play. There are no lengthy screen redraws, yet the graphics are very well rendered. Your golfer is animated well, the fairways, greens, bunkers, and sand-

traps are easy to spot, and the ball looks like it's flying where it's supposed to. Unlike most golf games, this one makes strong use of the TV camera. As the ball begins to land, the view shifts immediately to where it hits, and as it approaches the hole, an insert appears in the top left corner showing the hole and how close the ball is to it.

The putting game is handled by a realistic 3-D depiction (a separate view) that lets you know exactly where the hills, slopes, and ridges are. On the course, you can perform chip shots, punch shots, and fringe putts; you can "take a mulligan" (take a shot over) in practice; you can get instant replays of shots; and you can even accept the fact that you've failed the hole and move on to the next one. *PGA Tour Golf*, a game of great detail, is excellent.



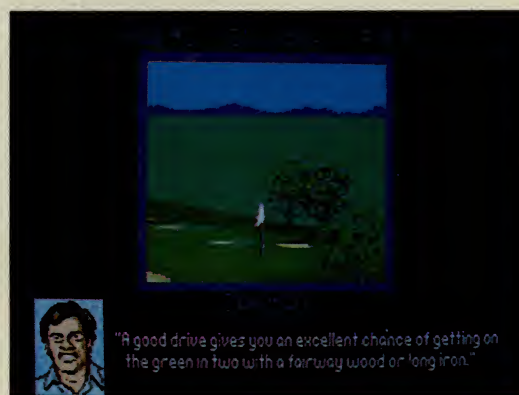
By choosing driving range in *PGA Tour Golf*, you can practice your drives all you like — an excellent idea before competing in a tourney.

Study this map of the sawgrass court carefully. Knowledge of the overall course helps to ensure that you turn in your best possible score.



At each green, you can get an overhead 3-D display. This is immensely helpful when planning where to putt.

At the start of each hole, you can receive a fly-by view of the hole. This will assist you in planning strategy for that hole.



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Design Your Own Links With Unlimited Golf



Deriving its success from Jack Nicklaus' *Greatest 18 Holes of Major Championship Golf*, Jack Nicklaus' *Unlimited Golf* and *Course Design* takes the solid graphics and gameplay of its predecessor and expands them to include the ability to design actual courses.

In one sense, this expansion is completely natural. Jack Nicklaus, after all, is the designer of some of the most challenging courses in North America. To put his name on the cover of a game, therefore, means paying attention to this aspect of his celebrated career, and the previous game didn't quite do that. *Unlimited Golf* takes care of that oversight, and in doing so offers something unique in computer gaming.

Unlike the original *Nicklaus* game (see sidebar), in which you played individual holes from several different courses, *Unlimited Golf* gives you two complete Nicklaus-

designed courses on which to master your game. This feature lets you golf to your heart's content on a completed course and gives you something to edit when it comes to designing your own personal course.

First, check out the golfing. After studying an overhead view of the entire course, you can choose to play a round of golf; change courses or opponents; or head to the driving range, the practice green, or a specific hole you wish to practice. You're then given information on the shape of the course and the speed of the greens, as well as the weather and wind conditions.

Next, you get a well-rendered overhead view of the first hole, and then a screen

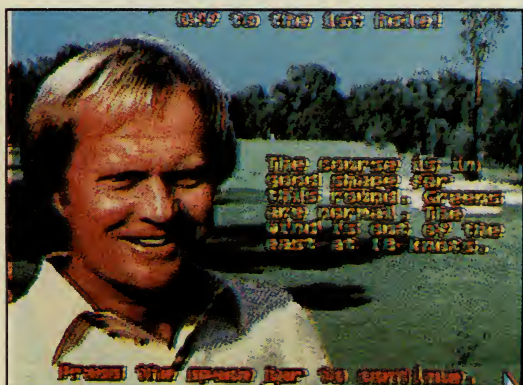
with Jack offering some advice. Finally, the golfing screen itself appears, with a shot gauge on the left, an information window on the bottom, and the graphic of the golfer and the course. Select your club, aim your shot, then click once on the shot gauge to select your power, and a second time (as the bar descends) to hit the ball.

Once on the green, *Unlimited Golf* surpasses other games. A grid (which you can turn off) appears over the screen; along with the break meter at bottom left, this grid helps you aim your putt. Putting is very difficult in this game—the cup seems smaller and smaller as the game goes on, and proper aiming, as well as full knowledge of the green, is vital to your success.

But *Unlimited Golf's* most exciting feature is its elaborate course design module. You can edit existing (and future) courses, or you can

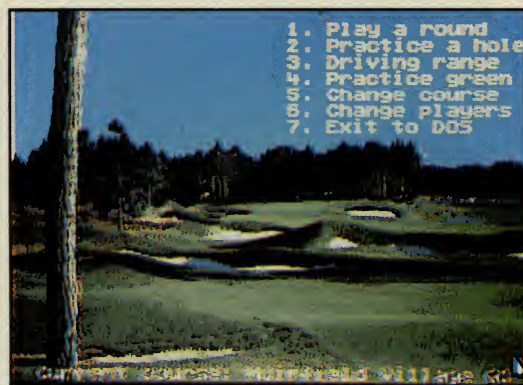
design one from scratch. You begin by selecting a coastal, suburban, or desert plot of land, then work with the topography. This full design package includes the ability to paint background screens and choose from among rolling hills, steep rises, gentle slopes, and even huge ravines.

Unlimited Golf will be especially attractive for players who don't want to shell out money for course disks. Now, instead of waiting for new courses, all you need to do is add your own. Use your individual talents, and then trade courses with friends to see who can make the most difficult one of all.



If you're a novice golfer, it helps to have advice from the Golden Bear himself in Jack Nicklaus' *Unlimited Golf* and *Course Design*.

You really can't beat the VGA graphics of *Unlimited Golf*. The graphics, variety of options, and excellent game play add up to a top-notch simulation.



The game play is similar to other golf simulations, but the courses on which you play were actually designed by Jack Nicklaus.

Before you start designing your own course from scratch, try editing one of the existing holes.



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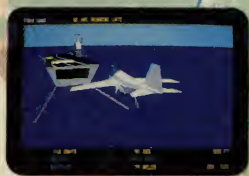
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Zero in on the MiG, before he zeros in on you.



Mission accomplished! Now back to Yankee Station to plan your next attack.

Linebacker Campaign of 1972, you won't find any other simulation so like the real thing.

Select from multiple missions or map out your own using the mission creator.

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Screens shown are IBM EGA. Others may vary.
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Classic Games for the 19th Hole

Computer golf games have been around as long as personal computers and videogame machines themselves. For the MS-DOS world, however, with its limited graphics capabilities, golf games have only recently begun to come into their own.

Accolade's *Mean 18* is still the favorite of many electronic golfers. Although its graphics are primitive (it uses blocks rather than shapes), it offers some very solid play features. Course disks proliferate, and

the game simply keeps hanging in there. *Mean 18* is the final word in the old style videogame simulations, and its fans are legion.

One of the earliest golf games supporting strong graphics was Access's *World Class Leader Board*. Originally appearing on the Commodore 64 (and later the Amiga), this game drew considerable ire by including a *dongle* (a piece of hardware you attach to one of your machine's ports) as its form of copy protection. But

it also had a large number of fans because its graphics and playability were very strong indeed. The MS-DOS version retained these features, and the game has added even more support with its extra course disks. *World Class Leader Board* has remained perhaps the best multi-player golf game — at least until the release of *PGA Tour Golf*.

Aside from boasting probably the longest title of any sports game ever, *Jack Nicklaus' Greatest 18 Holes of*

Major Championship Golf is distinguished by its realistic detail. Sanctioned by the Golden Bear himself, *Jack Nicklaus* lets you play against a simulated Nicklaus. That raises computer golf to the same status as computer basketball, with its simulations of Bird, Jordan, Dr. J, and others; computer baseball, with its simulations of several players; and computer hockey, with its digitization of Wayne Gretzky.

GP



To shoot in *Mean 18*, use the familiar power bar to start your backswing, hit the ball, and control your accuracy.



The computer lines up each shot for you. But when you change the line of the shot, you move the entire teeing area to the right or left.



The power/snap bar moves very quickly in *World Class Leader Board*. If your balls don't go very far, perhaps your timing is off.



There are more than 50 bunkers on the Gauntlet course, so learn to get out of them quickly.



At the beginning of each hole in *Jack Nicklaus*, a signpost gives you an overhead view of the entire hole.

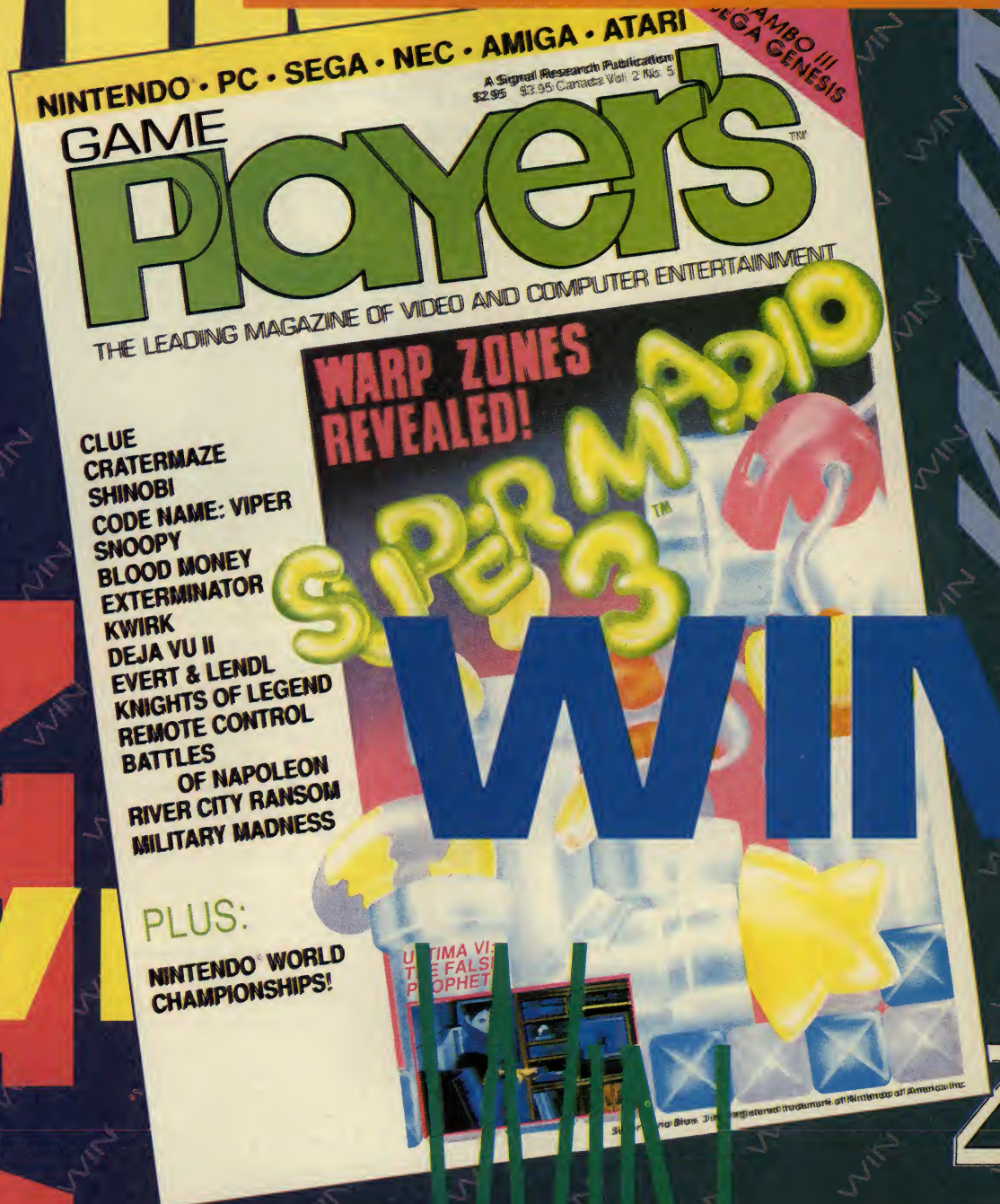


The break indicator helps you decide the direction and power of your putt.

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THE DESKTOP GENERAL

WILLIAM R. TROTTER

A TALE OF TWO WATERLOOS



Waterloo



One of the primary attractions of war-gaming has always been the chance it affords amateur generals to tinker with history, to take one of those epochal contests which decided the course of subsequent events, and see just what the results might have been if Field Marshal von Himmelschlag had attacked at daybreak, as historians tell us he *ought* to have done, instead of dawdling over breakfast until 10 a.m.

Of course, some battles lend themselves to this kind of what-if approach more than others. Gettysburg, for example, is certainly a pivotal, history-shaping engagement, but speaking as one who has re-fought the thing dozens of times, there is almost no way Robert E. Lee can win.

But the Battle of Waterloo is a different matter entirely. There is really no logical reason why Napoleon did not win. The flukish nature of the engagement has had historians speculating on such peripheral considerations as the state of the emperor's digestion to explain why he was off his form,

and often so curiously listless, during that epic struggle. Even the victor, the crusty Duke of Wellington, described the battle as "a damned near-run thing."

The fact that two simulations of the Battle of Waterloo have crossed my desk recently indicates the great interest of this particular contest. Since they approach their subject in radically different ways, a comparison of the two can tell us rather a lot about the creative possibilities for game designers.

The games in question are *Waterloo* (designed and programmed by Peter Turcan and originally published by Mirrorsoft in England) and *Battles of Napoleon* (designed by Chuck Kroegel and David Landrey). Both games, interestingly, are marketed in the U.S. by Strategic Simulations, Inc.

The graphics in *Waterloo* are likely to take your breath away. The spectacular 3-D panorama of the battlefield (from either Wellington's or Napoleon's location, depending on which side you've chosen to control) is shown as one might see it

from a tethered hot air balloon 500 feet in the air. The armies are spread before you on the rolling Belgian countryside: masses of blue, scarlet, and white on a green pastoral landscape. Unit formations are very cleverly modeled. If you look really closely, you can see that the main bodies are stylized abstractions — but individual officers on horseback, individual gun batteries, flags, and non-coms have been rendered in some detail, and the masses behind them have been touched up with graphic suggestions of irregular height, regimental flags, and slightly out-of-line muskets so that the eye perceives a much greater degree of realistic detail than is actually present. It's a neat bit of *trompe l'oeil*.

If you're a stickler for realism, you can elect to "see" only what Napoleon and Wellington could see at any given time, relying on your map and the invariably delayed reports of your officers to guide your decisions. If you really want to study the battle as it unfolds, however, you need only type in a command such

as: "Look east from Le-Haie-Saint," and the computer will obligingly repaint the screen to show you everything you could see from that vantage point.

No other wargame I've seen does a more realistic job of simulating Napoleon's process-of-command. You must actually issue the relevant command by typing in the words of a real hand-written dispatch: "Drouot order Guyot to attack enemy infantry 1/2 miles NE of Hougomont at 2:30." Once the dispatch has been, well, "dispatched," a realistic amount of time must pass before you can see it being acted upon. I ordered an assault on Hougomont Farm at 11:45, but the designated regiments did not carry out the attack until 12:30. After a few games, you get the sense of what it was like to command a Napoleonic army.

So far so good. If designer Turcan had gone all the way and given us good battle scenes to match his superb overall concept, *Waterloo* could have been a front runner for War Game of the Year. Alas, he did not.

First of all, there is no sense at any time that what one is looking at is, after all, a *battle* and not just some sort of vast military pageant. On the real June 18, 1815, approximately 47,000 men lay dead or wounded on the field at the end of the day, but in *Waterloo*, there is not a single corpse to be seen. Unit formations, though smaller, look as spic-and-span as they did at the start. No fires burn, no guns lie smashed, no wounded men straggle off the screen.

Virtually no concession has been made to visual excitement and none at all to dynamism. While no one would want the same amount of smoke over a computerized 19th-century battlefield as there was over a real one, *some* amount of fire and brimstone is needed to create the illusion. Yet we see no flame from the cannon, no

shell bursts, no rolling smoke from the volleys of musket fire. Oh, sure, during the set-up you are asked: "Do you want to see cannons firing (Y/N)?" but if you select "Y" all that happens is a couple of silly little lines flashing on and off in front of the nearest cannon — rather like a bubble popping — and you have to look closely to see that much.

Worst of all, nothing *moves*! Yes, the positions of units change, but only at 15-minute increments, when the screen repaints itself. Order a cavalry charge and you see no *charge* — just the designated unit prior to its charge, then at the moment it reaches the enemy, and later after the battle has resolved itself one way or the other.

These severe — indeed almost puritanical — limitations conspire to give *Waterloo* a curiously static, detached quality which works at cross-purposes with its lush, cinematic graphics. It would be easy, in fact, to dismiss it as a "game," since playing it is about as exciting as brushing your teeth. But as a "simulation," it commands respect, and anyone with a serious interest in the Napoleonic era should at least give it a try. If you want to study how the Battle of Waterloo developed, and how Napoleon's command-process worked on that fateful day, Turcan's surgically clear time-lapse recreation surely allows you to do it in great depth.

By contrast, *Battles of Napoleon* offers graphics that might charitably be described as "utilitarian" in their EGA mode and are downright ghastly in CGA. It gives you a traditional, God's-eye-view of the entire battlefield, lets you issue instant commands to any unit not actively in a state of rout, and then lets you see the results.

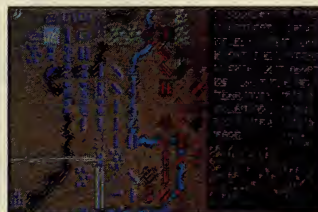
There's no attempt to represent the warring armies realistically — you get rectangles, lines, squares and circles — and yet, this

program's *Waterloo* crackles with suspense and dynamism. Cavalry actually charges (even though it's only represented by a moving geometric shape), infantry units break and form squares (even though they are only colored lines) and gun batteries blast murderous sheets of grapeshot (even though they're only little dots). In short, despite the game's hohum graphics, it requires only a little imagination to "see" a real Napoleonic battle developing, in all its drama, sweep, and bloody violence.

The command system isn't realistic — you have a degree of control over individual units' movement and behavior that a real Napoleonic general could only fantasize about — yet virtually everything that could affect the outcome of a smoothbore-era engagement has been gracefully factored into the playing system: morale, readiness, terrain, ammo supply, quality and proximity of commanders, fatigue, angle and range of fire, and formation.

One battle. Two games. Two dramatically different philosophies driving two utterly dissimilar game-systems. For me, there's no question which game is more fun to play, but I don't consider the time I spent with *Waterloo* to have been wasted — I learned much from it about how Napoleon had to implement his battle plans in the face of primitive communications and human unreliability, and I gained a greater respect for him as a result. I recommend both games, if only as an example of the diversity that exists within the genre.

GP



Battles of Napoleon



ALTERNATE LIVES

NEIL RANDALL

COME FLY WITH ME



In the early missions, you board a bronze dragon. Later, other dragons take this one's place.

Although this column deals with role-playing games and *DragonStrike* isn't one, this game will interest so many fans of the genre that we wanted to review it here. It certainly could be called an alternate life experience.

Quite simply, *DragonStrike* is a flight simulator. But instead of flying an F-18 jet or a propeller-driven Cessna, you mount a mythical dragon. Now, obviously, this idea isn't exactly "simulation" because it doesn't attempt to duplicate reality. But within those limits (and what are computers if not ways of erasing limits?), *DragonStrike* does a creditable and enjoyable job.

In this unusual game, you play the role of young, eager, inexperienced knight of the Solamnic Order of the Crown. Like *Champions of Krynn*, also from SSI, *DragonStrike* operates in the popular fictional world of *DragonLance*, except that here you are part of the aerial battle you only hear about in the other game. The realm of Ansalon has been all but overrun by the evil dragon armies,

and only one good army stands between them and total conquest. You are part of that army, of course, and you have been recruited as a dragon rider. Your goal, essentially, is to keep the skies clear of dragons so your armies can oppose the bad guys.

To fulfill your quest, you must successfully complete 22 separate missions. Periodically, you'll be given a new rank, and, less frequently, a more powerful dragon to ride. You can remain as a Knight of the Crown for the entire game, rising in rank toward Lord Warrior, or you can transfer to the Order of the Sword and/or the Order of the Rose. The highest rank in the Order of the Sword is Lord Clerist, while masters of the Order of the Rose are called High Justices. Actually, becoming a Knight of the Rose is the only way to ride the two gold dragons, so it's to your advantage to switch early. But your missions will be more dangerous in this order.

You begin the game by mounting Sirdar, the old bronze dragon, and riding him into

battle against two evil white dragon scouts. If you fly well, this will be a quick battle. The whites are unsophisticated and fairly weak, and succumb quickly to Sirdar's breath weapons of lightning and repulsion gas. In a tight spot, you can also spear the dragons with your lance.

In time, you're offered Adamant, an older, larger, more powerful bronze dragon. Continue through the ranks, and you'll get to know Argent, a silver dragon whose breath weapons are Paralyzation and the Cone of Cold. Past Argent is Ulaina, the female silver dragon who can climb into the skies much like an F-18. Then come the two gold dragons, Dolce and Thew. Thew, with his Cone of Fire and Chlorine Gas breath weapons, suffers only mounts of the highest ranks, but his skill is worth the effort.

Once past the white scouts, you must take on a group of wyverns atop the cliffs of Cristyne. Immediately you're against a different class of enemy—these beasts are far more



This colorful map shows the extent of the strategic problem. Each red dragon represents an evil army, while a solitary good army opposes them.

maneuverable than the whites. Often you can see them behind you rather than in front.

The next mission pits you against an acid-slinging black dragon, after which you must recover some valuable artifacts and decide whether or not to join the Order of the Sword. Later missions put you in deadly combat against a host of blue dragons, a large group of different kinds of dragons, a flying citadel, a black dragon highlord, and finally the powerful and terrifying red dragons.

Most of *DragonStrike* is played from the main screen. From here you have a dragon's-eye view, with the dragon's head and your lance appearing in front of you. This screen shows you your dragon's speed, power, and availability of breath weapons. It also gives you your remaining hit points and offers an arrow and a crystal ball (i.e., radar) to point you towards your foes.

The quality of the graphics on this screen naturally depends on the capabilities of your PC. Those with color VGA and AT-class machines or higher will enjoy considerable graphic detail. Those with less capable machines can choose to eliminate the dragonlance graphic and replace it with a crosshairs target sight; reduce the enemy dragons from bitmap drawings



This is the standard *DragonStrike* screen. From here you can see your speed and power, the availability of breath weapons, and the hit points you and your dragon have left.



Two white dragons are directly ahead. Speed up and catch them, then destroy them with your lance or your dragon's breath weapon.

to polygon shapes; and change the many shapes from solid polygons to wireframe polygons.

The game is equally playable no matter which graphics mode you choose, so there's no point hindering your progress by selecting graphics that make your computer work too hard. These options, though, like much else in *DragonStrike*, demonstrate a very encouraging concern for customer preferences.

To play the game, you simply maneuver your dragon into position and use its breath weapons or your dragonlance to fight. Each dragon has two breath weapons, accessible from the keyboard or from joystick or mouse buttons. You must use breath weapons to attack soldiers on the ground or ships in the sea. Use the breath weapons with care, however — your dragon takes some time to recharge after using one.

In close combat, you can use your lance. Of course, the enemy dragons can also use their teeth and claws (as can yours), so it's hardly a picnic. If you or your dragon are hit, you could fall toward the ground. Unless you've found the featherfall ring, your only hope is that your dragon will swoop down and catch you before you hit the ground.

To maneuver your dragon, you must make good use of speed, height and pitch, and banking. In addition, you must learn to use the side and rear views since your enemy isn't always directly in front of you. Pressing the "A" key speeds you up, and pressing "S" slows you down. The dragon also speeds up when you dive. Height is equally important because enemy dragons attempt to descend from above,

and you must try to do the same to them. Each time you bank you risk losing speed and altitude.

Your dragon also needs to rest occasionally. Gliding gradually restores its power and also makes your mount more maneuverable. You can land the dragon, too, but in general doing so is not a good idea; these beasts don't appreciate the physical exertion required to take off again.



The preferences screen lets you adjust graphic detail and other important play considerations.

DragonStrike is a game whose time has come. As far as role playing goes, officially you're simply trying to increase in rank the way you do in an air force simulation. But there's more to the role-playing element than just that. One of the problems with fantasy role playing is that most encounters occur in words on the screen rather than in high-quality animation as seen from a first-person perspective.

DragonStrike offers us a rare glimpse of what one design team thinks mounting a dragon would really be like. Now if we could only get similar first-person perspective games involving battling sea monsters and undead creatures, combine them with first-person perspective in which we interact with high magicians and exotic deities, and then feed them all back into a top-notch role-playing system — the entire role-playing industry would be both changed and improved dramatically. The potential is enormous.

GP



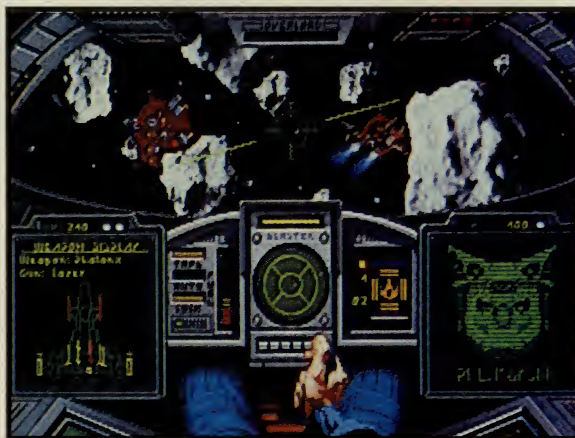
As you approach the enemy dragons, you must ready your lance and your breath weapons.



VIRTUAL REALITY

SELBY BATEMAN

A CINEMATIC SMORGASBORD



Wingleader from Origin is a state-of-the-art 3-D space combat game with a cinematic score synched with the on-screen action.

Those PC owners who enjoy simulation games are in for a smorgasbord of treats, some immediately and some right around the corner. The recent Consumer Electronics Show (CES) in Chicago offered plenty of evidence that computer simulations are getting bigger and better.

As PC technology continues to advance with sound and music enhancers, VGA graphics, and faster machines with more memory, game technology is keeping pace. Some of the newest games being shown at CES — especially in the simulations area — are quite remarkable.

And one of the most important trends in this continuing development is that the games are taking on an ever-increasing look and feel of motion pictures.

Cinemaware, with pioneering games like *Rocket Ranger*, was the first PC game software company to begin marketing its games as motion picture-style experiences several years ago. A few others, most notably Electronic Arts,

have been exploring the motion picture parallels for some time, both in the artist-director-producer structure and in the approach to lights (color graphics), camera (the player interface and perspective), and action (game speed, sound, and music).

As our editors explored the busy exhibit booths and demonstration suites of the many game companies at CES, we were struck by just how far this cinematic trend has come in such a short time. Jump cuts, 360-degree pans, zoom-ins and zoom-outs, game soundtracks that pace the on-screen action — all of these tools and more are in evidence from a variety of game companies.

Many of the techniques that film makers have used for decades are now being tried with real success on PCs. Although the technology is not yet true cinema quality, a fast PC running VGA graphics and making use of a good sound enhancer can now produce truly startling effects.

In future issues, we'll be exploring in more detail some

of the wonderful new simulations planned for late this year and next. But for now, here are a few of the games that especially caught our attention because of their cinematic approach.

Fans of Lucasfilm's superb *Their Finest Hour: The Battle of Britain* World War II aerial combat game will rejoice at the follow-up, *Secret Weapons of the Luftwaffe*, a PC game planned for release in late fall. Using an enhanced *Finest Hour* game system, *Secret Weapons of the Luftwaffe* lets armchair pilots play what-if with some of the most famous — and strangest — aerial weapons of WWII.

Take the controls of American planes such as the B-17 Flying Fortress bomber, the P-51 Mustang, or the P-47 Thunderbolt to dogfight against such exotic German aircraft as the Messerschmidt 262 twin-engine jet fighter or the Horten 229 Batwing flying wing — a couple of late-blooming aircraft from the Axis arsenal that, if developed earlier in the war, might have made a tremendous difference in the



PGA Tour Golf from Electronic Arts offers sweeping panoramic shots from green to tee.

outcome.

You can fly and fight on either side, and the Lucasfilm special touch on game graphics makes this another beautiful game to play or watch. Lucasfilm's excellent instant-replay camera is even more versatile with the new game. Tinkering with these camera angles really adds new dimensions to this type of computer game.

Camera angles are also a part of Electronic Arts' new *PGA Tour Golf*, a first-rate PC golf simulation game. The preview of each hole includes a bird's-eye panoramic sweep from tee to hole that gives would-be pros a terrific view of the terrain. It's the kind of fly-over effect that is used so strikingly in televised golf coverage.

Origin, perhaps best known for its succession of popular *Ultima* adventure role-playing games, drew lots of admirers at CES with its new *Wingleader: The 3-D Space Combat Simulator*. Designer Chris Roberts, of *Bad Blood* fame, demonstrated some of the 256-color VGA bit-mapped 3-D graphics that are a part of the game. Coupled with these powerful space game graphics is a full-bodied and fast-paced action soundtrack laced with MIDI (musical instrument digital interface) hooks that smoothly synchronize the soundtrack with the on-screen action. The results are reminiscent of the effects achieved by John Williams' *Star Wars* motion picture score. This movie-style score was composed and arranged by George Alistair Sanger with just that cinematic purpose in mind.

Wingleader looks like one hot game, both visually and aurally. Origin's director of sales Marten Davies pointed to

the demo and said, "*Elite 1990*," referring to the earlier *Elite* outer space action/strategy game introduced by Davies into the U.S. market in the mid-1980s. That game took the Commodore 64 market by storm, and Origin believes it has a similar winner on its hands with *Wingleader*.

One of the most impressive new game lineups at CES came from Three-Sixty, the publishers of the recent *Harpoon* submarine simulation. Three-Sixty president Tom Frisina and product development coordinator Jon Correll offered the press previews of several upcoming games that are very cinematic in scope and approach.

Megafortress: Flight of the Old Dog, based on the best-selling novel by Dale Brown, puts you inside a souped-up B-52 bomber as you try to knock out a secret Star Wars base on the eastern border of the Soviet Union. This promises to be a flight simulator with a difference, suffused with a movie-like techno-thriller tension and atmosphere in a beautiful 256-color, VGA, 3-D environment.

Three-Sixty is also finishing a similarly atmospheric submarine simulation featuring top-notch graphics and a realistic World War II U-boat layout. The look and feel of the game may remind some game players of the suspense-filled motion picture *Das Boot*. Look for this as-yet untitled submarine simulation in September, with *Megafortress* planned for October release. Also coming from Three-Sixty is *Ace of Aces II*, a beautifully rendered World War I aerial dogfighting game for one or two players.

There's simply not room in this issue to do justice to all of the great-looking simulation games that were previewed at CES. For example, Cinemaware's *Wings* for Amiga and PC offers an exceptionally visual three-dimensional World War I action scenario featuring wonderful color screens.

MicroProse will debut the

eagerly awaited *Silent Service II* submarine simulation and *Knights of the Sky*, a World War I aerial combat game — both of which feature superbly crafted VGA graphics in a motion picture-like atmosphere. Virgin Mastertronic's "supertext" adventure, *Wonderland*, a Lewis Carroll-style game created by the wizards at Magnetic Scrolls in the United Kingdom, offers a sophisticated text parser and some of the most stunningly rendered color screens of any text-and-graphic adventure. Electronic Arts' *Gorbachev's Ace: The SU-25* puts you in a Soviet attack plane flying secret attack missions with rich 3-D polygon MCGA graphics and AdLib sound support.

And, of course, Sierra On-Line continues its pioneering approach in creating motion picture-style graphic adventures such as the *King's Quest* and *Space Quest* series, now with new compact disc and VGA versions, respectively. Sierra calls its new animation effects "cinemagraphic," and continues to push at the frontiers of high-end graphical gaming.

The company's recent purchase of highly respected game developer Dynamix is one indication of its commitment to cinematic approaches in gaming. Dynamix displayed several remarkably beautiful games at CES, including *Heart of China*, *Rise of the Dragon*, and *Stellar 7* — the last a handsome new version of an older game.

A few of the other top games featured at CES are discussed in this issue's Guidelines section and in the Editor's Notes, with much more in-depth coverage scheduled for the next issue. For now, suffice it to say that the PC game environment has never been better for simulation fans.



Silent Service II is the eagerly awaited MicroProse World War II submarine simulation.

GP



Gwenhyver is waiting for you in the rose bower. Despite her passionate love for Launcelot, she has a pure love for you and gives you an item of protection.

Conquests of Camelot: The Search for the Grail

LESLIE MIZELL

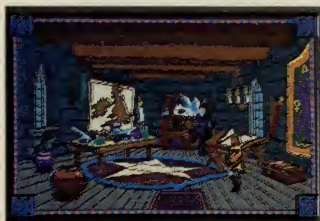
They said it never rained 'til after sundown. By eight the morning fog must have disappeared. But Camelot isn't such a congenial spot anymore.

And no one is happ'ly-ever-aftering.

The once-shining kingdom of Camelot is now divided. Knight opposes knight, the Christian God is weighed against the Roman god Mithra, and Gwenhyver is in love with Arthur's most beloved liege. Unless there's a resurgence of the laws of chivalry, Camelot is doomed.

Merlin believes that if the Holy Grail—the legendary cup Christ used during the Last Supper—is found, Camelot would return to its former splendor. King Arthur sent his three bravest knights, Gawaine, Launcelot, and Galahad, on a quest to locate the Grail, but none of them returned. Now the task is left to Arthur himself, who must complete the crusade before Camelot falls into ruins.

Only in legends are beautiful ladies transformed into ugly hags by a magic spell. Luckily, you don't have to break the news to the restored Lady Elayne that her beloved knight is dead.



Though there are only a few items you need in Merlin's chamber, the room holds a vast wealth of knowledge of ancient legends. So be sure to study the map and tapestry before you depart.



You must unseat the Black Knight three times before you're declared victorious. It takes nimble fingering of your keyboard to move the lance and shield into their defensive and offensive positions.



Your first battle, and you emerge unscathed. Rest assured that the Black Knight isn't as easy to deal with as these wild boars.



Once you've beaten the Black Knight, you can free Sir Gawaine from his shackles. Your duties do not end there, however. If left in the woods, your brave knight will certainly perish.



Conquests of Camelot is Christy Marx's first game for Sierra. Marx, the author of the "Jem" TV cartoon series and the "Sisterhood of Steel" comic books and graphic novel, worked with her husband, professional illustrator Peter Ledger, to research the Arthurian myths and legends. The two took out all the fluff and soap opera—Arthur being transformed into birds and fish, the Sword in the Stone, Mordred's fight for the throne—and the result is a game rich in atmosphere and detail. Even if you grew up reading *Morte d'Arthur*, *Idylls of the King*, and all the other Arthurian tales, you'll learn something new while playing *Conquests of Camelot*.

SIR GAWAINE AND THE BLACK KNIGHT

As Arthur, your quest begins within your own castle. First collect mundane items such as chain mail and money, then concentrate on objects with more magical powers. Gwenhyver will give you an enchanted rose for protection, and Merlin has prepared a lodestone for you to use as a compass. Prepare yourself spiritually as well as physically; the castle has its own chapel, and you should spend some time in prayer. Don't leave the castle without a room-by-room search



If you're not very good at puzzles, you may have trouble getting past the riddle stones. Save the game before the first riddle is asked; if you get stumped, you can reenter the game and try your luck with a new batch of questions.



The Old Ones hold the key — literally — to the Mad Monk's treasure. Cross their incorporeal palms with silver and they disappear, leaving behind the key to the locked well.



There are few wrong paths to follow in Conquests of Camelot since the game won't let you visit any unnecessary locations. Your first stop after the forest should be the home of the Lady of the Lake — Ot Moor.



Solving the mystery of the Language of the Flowers isn't difficult as long as you have your Liber ex Doctrina at hand. Here again, you can save the game before playing and, if you're stumped, reenter the action with a different set of questions.

— once you leave the castle grounds, you won't be able to reenter.

As you search for supplies, question everyone you meet about your three lost knights. They provide the information that will help you decide where to begin your search. If you listened carefully, you know to ride into the woods. Galahad will be the first knight you rescue.

For the most part, the forest is filled with annoyances rather than dangers. Some creatures can be bribed into passivity, while others provide valuable weaponry. Your true foe is in the center of the weald — the Black Knight, the very man who captured Gawaine. Be brave enough to accept his challenge of a joust, but don't forget that whoever is unseated three times must admit defeat.

During your joust (and don't forget to save your game before the screen changes to the jousting mode), one set of keys controls your shield; another, your lance. You'll probably die a few times before you learn to move your weapons in tandem, then a few more times before you learn to lower the lance immediately. The perspective of the jousting screen makes it very difficult to tell if you're going to land a blow,

and it's even more difficult to see his blows hit you. Watch the Black Knight's shield; he moves it into position as he's riding toward you. If he protects his right side, it's fairly easy to land a blow on his left.

Once the Black Knight has been dealt with, you'll find Gawaine chained to a tree nearby. The knight is near death, so it's not enough just to break his shackles. Each of the three knights must be saved, not simply removed from danger. So give Gawaine your horse, and he'll return to Camelot safely.

Your expedition into the forest is nearly complete: You have only to save Lady Elayne, solve the mystery of the riddle stones (quite a task if you're playing the game alone), defeat the Mad Monk, and earn a key from the Old Ones. The key opens a locked well which

holds a secret treasure. Once you have the treasure, back-track until you return to the map of Britain. It's time to rescue Sir Launcelot, your favor-

ite knight—and Gwenhyver's favorite, too.

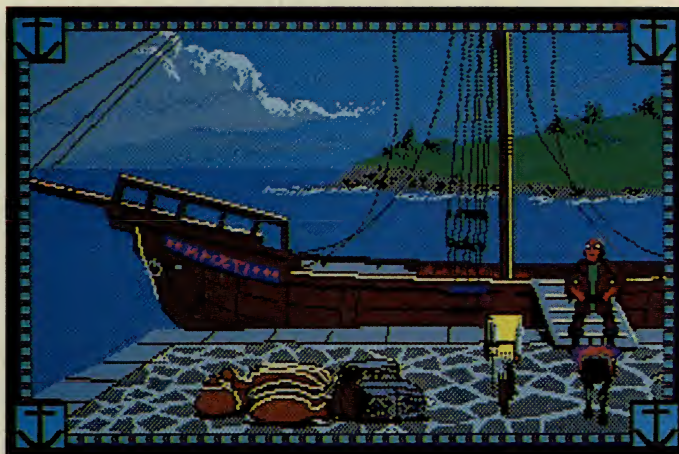
SIR LAUNCELOT AND THE LADY OF THE LAKE

You've learned from your conversations that Launcelot was last seen on his way to question the Lady of the Lake. Follow his path, and you'll end up in the frozen wasteland of Ot Moor.

The horizontal path you originally follow is soon blocked by snow, so it's clear you must cross the ice to reach the Lady of the Lake. But the cracked ice is dangerously thin in places — if only you had some protection. Wait! Didn't



The Lady of the Lake sends Sir Launcelot back to Camelot after you've passed your test. Since Gwenhyver is undoubtedly anxious to nurse him back to health, you'd best hurry to finish your quest.



From Ot Moor you should go to the port city of Southampton for your voyage to the Holy Land. If you don't have enough gold to pay for your voyage, start using silver coins until your passage is secured.



There's an old Arabian saying: Never trust water when skeletons lie on its shore. OK, it's not an old adage—but it's still good advice.



You must prove your bartering skills in the Jerusalem bazaar. Almost everyone here has a secret need that can be filled by one of the other vendors.

Gwenhyver say the rose she gave you would shield you from harm? Under its sheltering spell, you can cross the flocks without fear.

Though the Lady of the Lake seemed benevolent when she gave you Excalibur many years ago, she's evidently become heartless and cruel with the passage of time. Launcelot is trapped in a column of ice, and the Lady of the Lake has a similar fate in store for you unless you can pass a test of wisdom.

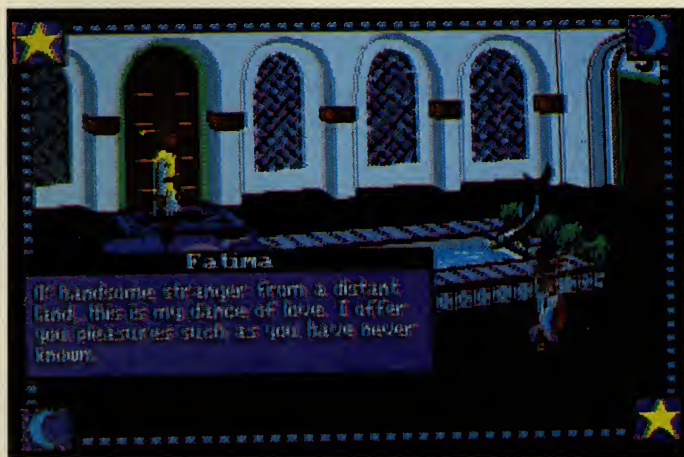
Using the section of the *Liber ex Doctrina* (the game manual) on the Language of the Flowers, you must identify three blossoms from a bush of ten. The Lady of the Lake asks a riddle to identify each flower. For example, if the answer to the riddle is "true love," you would select the forget-me-not on the bush. It's an easy test, but one mistake could put you in cold storage forever.

Once you've passed the trial of the Language of the Flowers, Launcelot is freed and spirited away to Camelot. There's only one knight left to rescue, but Galahad is far from home. Go to Southampton and book passage on a boat that can take you to Gaza in the Holy Land.

SIR GALAHAD LOCKED IN THE CRADLE OF THE DEEP

Your trek across the desert to Jerusalem is not without danger, and no sooner do you step inside the city walls than you are robbed of every cent you carry. Your donkey has served you well, but his greatest gift may be the money he brings you when he is sold.

The Jerusalem bazaar is a bewildering line of stalls and shopkeepers. You should first



Fatima obviously doesn't know that you are a married man and a chivalrous knight of the Round Table. Resist her advances, and she'll give you a final test to prove your valor.

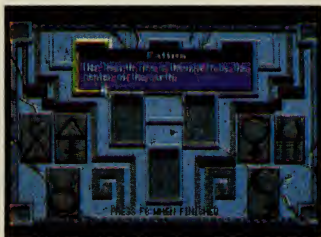
talk to Tamra, the old apple seller. Buy a truth apple from her, then begin talking to the other peddlers. You'll find that each one has a secret desire for an object one of the others can provide. Use your bartering skills to help each one until you finally reach the innkeeper. Accept his offer of lodging for the night.

After you've rested, you should stroll through the bazaar a final time. You'll finally be able to meet Ione, the girl with the cage of doves you saw so many times the day before. Ione, in turn, sends you to Fatima, who administers a final test of wisdom. After answering her questions about the six goddesses, you should be able to find the entrance to the catacombs without further ado.

It's in those dank, rat-infested depths that you find Galahad. Though he's at death's door, you have the power to heal him—possibly at the expense of your own life. Once the knight is safe, complete your search of the catacombs. You're looking for two things: the statue of Aphrodite, and the item which can bring that statue to life.

KING ARTHUR AND THE LAST CRUSADE

Aphrodite provides the plan for your escape from the catacombs, but Merlin provided the key long ago in Camelot. Don't forget that you have his lode-stone, the Dark Ages' equivalent of a Boy Scout compass. Using it's northward-pointing needle, you can escape the moldering depths.

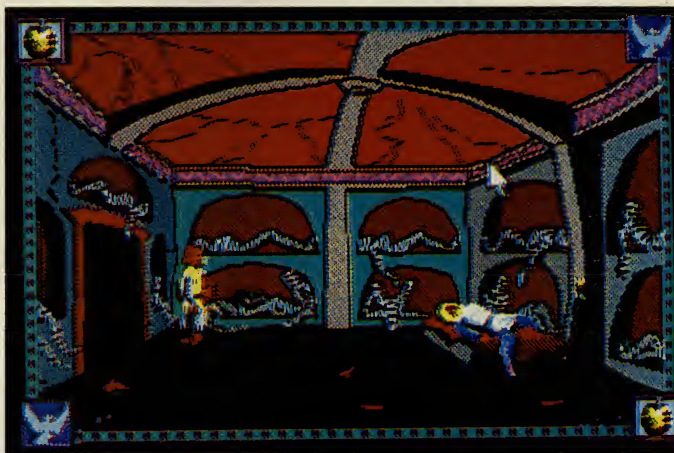


It's not difficult to match the descriptions of the goddesses with their symbols if you wrote them down when they were explained to you. Or were you so addled by the heat in the desert that you forgot this precaution?



The Thing does indeed have a golden treasure, but you'll regret it if you approach the creature without protection of some kind. Perhaps it's that pentacle that keeps him trapped inside the sarcophagus.

Naturally, you find yourself in a situation worse than the one you left. A final battle awaits you in the Temple of Aphrodite, but the Saracen—though a formidable opponent—isn't difficult to defeat if you have the knightly virtue of patience. When your sword strikes him, you can see a flash



where the blow lands. Keep attacking the weakened area (while protecting your own body, of course), and he will soon fall. Forbearance is fundamental; quick moves and parries only drain your strength.

The Saracen vanquished, Aphrodite's spirit appears with the final clue you need to find the Holy Grail. You've saved your kingdom from desolation in the nick of time.

There's no way to avoid being bitten by a rat when you enter the room where Sir Galahad lies near death. Now you're really caught on the horns of a dilemma: Whom do you save, yourself or your knight?



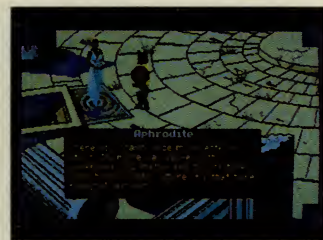
Aphrodite seems to be asking for something with her outstretched hand. Give her the golden apple, and she will make sure you escape the catacombs.

There's no denying that *Conquests of Camelot* is a beautiful game. The graphics are lovely (though *when* is Sierra going to come out with a VGA game?), and the borders on each screen almost turn them into pages from an illuminated manuscript. It's also not a difficult game to play: challenging for beginners, but still enjoyable for experts. The action is linear and logical — there are no wild goose chases interrupting the steady stream of adventuring.

And *Conquests of Camelot* won't disappoint those gamers who enjoy Sierra's scoring system, which assigns points to actions as a running tally on the player's progress. At the end of the game, you receive three scores — one in skill, one

in wisdom, and one in soul. Of course, a drawback to this system is that when you replay the game, you won't know if a new action adds any points until the end.

The best thing about *Conquests of Camelot* is that it leaves the player thinking of the next adventure in the series. There are literally dozens of possibilities, especially when you consider that Arthur was really the only true character in this first adventure. Gawaine, Launcelot, Galahad, Merlin, and Gwenhyver played mere cameo roles. So until the next



Use the Liber ex Doctrina a final time to learn where Aphrodite has hidden the Holy Grail. Your quest is nearly at an end.



Safely back in Camelot, you place the Grail on the altar, knowing Camelot will be restored to its former glory.

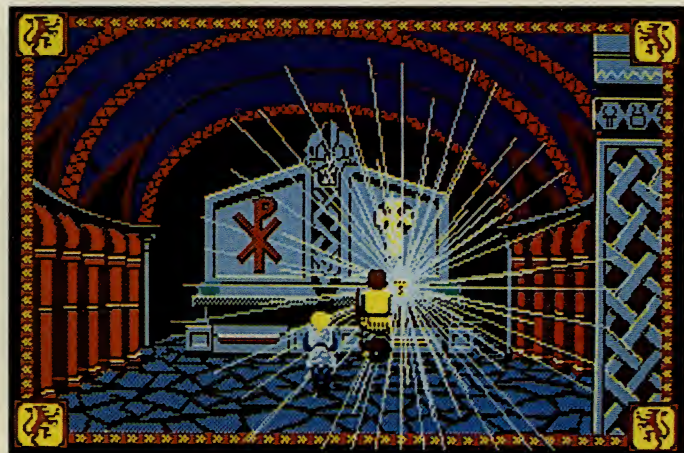
crisis befalls Arthur's kingdom, don't let it be forgot that once there was a spot for happ'ly-ever-aftering — called Camelot!

GP

Hardware requirements: 512K minimum memory; VGA, MCGA, EGA, CGA, Tandy 16-color, or Hercules graphics; joystick and mouse optional; supports sound boards; 8 Mhz computer or faster recommended.



The Saracen isn't as dangerous an opponent as it may seem. Wear the helmet he gives you and eat the apple before you start fighting. Remember: Slow and steady wins the race.



Camelot may be healed, but all may not be well. Has anything changed between Sir Launcelot and Queen Gwenhyver? And are the knights of your Round Table ready to uphold the laws of chivalry once again?



A closed door is quite a temptation to a party of adventures. Does another guardian lie behind it—or perhaps something worse?

49

Dragon Wars

NEIL RANDALL

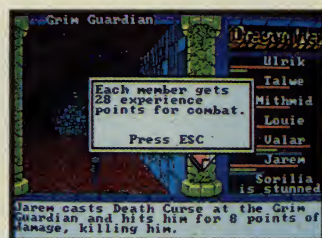
his game answers the question: "Whatever happened to *The Bard's Tale*?"

When the designers of *The Bard's Tale* series decided to strike out on their own

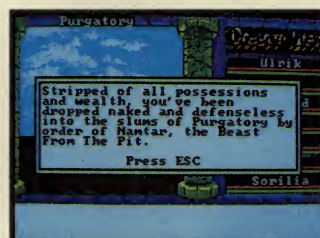
and form Interplay Productions, they left behind three very popular fantasy role-playing titles. The three *Bard's Tale* games had garnered critical raves and commercial success, but the series suddenly dried up, leaving its devotees out in the cold.

While Brian Fargo and crew were working on a redevelopment of their popular gaming system, Interplay released the popular *Battle Chess* and the critically acclaimed *Neuromancer*. Then they settled back into fantasy role playing. The real challenge was to take *The Bard's Tale* concept into new realms of playability and sophistication. How could it be improved?

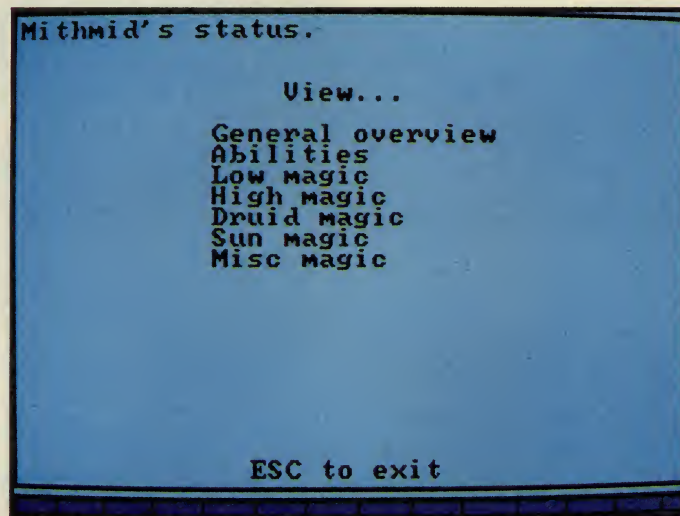
Enter *Dragon Wars*. Experienced *Bard's Tale* players will immediately see how this new game was designed in the *Bard's Tale* tradition, but new role-players don't need to be familiar with the earlier games. *Dragon Wars* has obvious similarities to the *Bard's Tale* system, but in many respects it is a considerable improvement. Gone are the interminable (and unavoidable) combats, the dif-



After defeating the Grim Guardian, each party member is granted 28 experience points. But now all your characters are in desperate need of healing.



At the beginning of *Dragon Wars*, the information box shows you how difficult your quest will be. Your first step should be to find some weapons—but even this isn't easy.



The status screens let you quickly and easily see the abilities, skills, magic, and possessions of your characters. You also equip your adventurers from these screens.

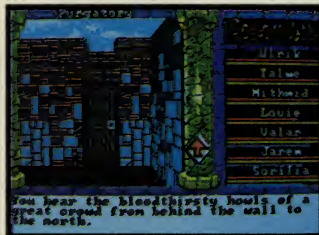
ficult magic system—even the lengthy and trying system of character advancement. In their place is a fast, enjoyable, highly playable role-playing system that should go far toward establishing a standard for this genre of games.

Role-playing games of the *Bard's Tale*, *Wizardry*, or *Might and Magic* type are notoriously difficult to play, especially for inexperienced players. Even so, they make up a large percentage—disproportionately large, in fact—of the computer game market. Those who enjoy these games keep coming back to them, and those who have never tried them are eager to become veterans. Strong though the market is, it will be even stronger as these games become more accessible. *Dragon Wars* puts them firmly on that track.

SURVIVING PURGATORY

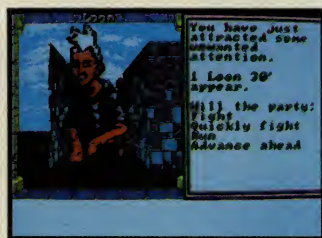
The basic plot of *Dragon Wars* offers no surprises. Your party of adventurers is out to undo the wrongs of Namtar, who has turned the magical land of Dilmun into a place of evil. You begin the game in a place appropriately called Purgatory, and you must survive and escape it to begin your pursuit of Namtar. There are monsters to defeat, items to find, and people to converse with.

The game is easy to begin. You can create your own characters if you wish, but the game



You're challenged to a fight inside the arena. You probably won't win, but you can get something out of the experience — some valuable weaponry.

comes with four that are just fine. The initial screen tells you all you need to begin the story, and from then on it's just a matter of wandering around by pressing the cursor keys. As soon as you encounter a character, the information box asks if you want to fight or run away, and choosing options is a simple matter of pressing the first letter of each command.

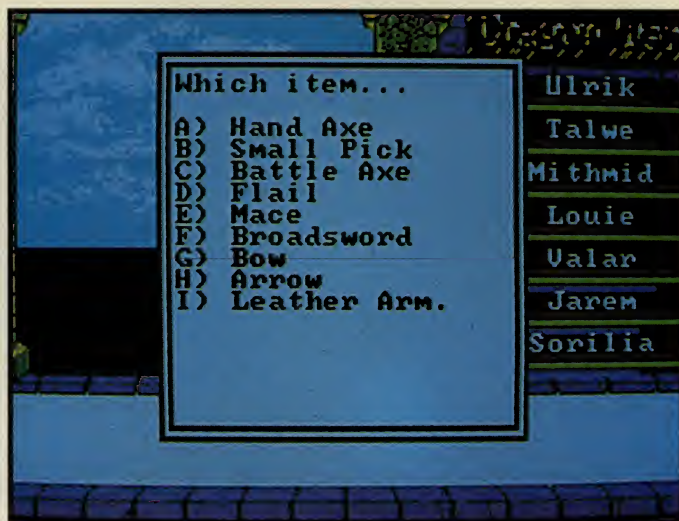


You never read about loons in your adventurer's textbook, but now you're face to face with one. You must fight him eventually, so why not now?

That essential interface—pressing one key only—is found in other areas of this game, too. When you start a new session, a menu appears asking if you want to begin a new game or continue an old one (you can only save one game). Press "B" for the first option or "C" for the other. When you want to save the adventure during play, just press "S." Not Ctrl-S, or Save in another menu, just "S." The game then asks you to confirm your decision, but it's still very easy.

Similarly, pressing "Q" sends you to DOS (after confirming). These are little details, certainly, but after a very short while their efficiency is greatly appreciated.

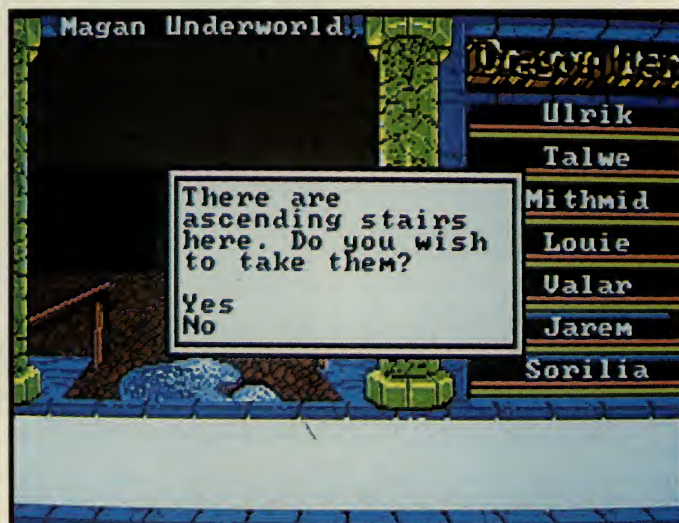
You've descended, with trepidation, into the Magan Underworld. Now your party's bravery will truly be tested.



When a number of items can be picked up, use this menu to assign items to individual characters.



You can find weapons in the arena, but only if you can face the gladiators. These men are tough, but you should be able to inflict some damage. Remember your magic.

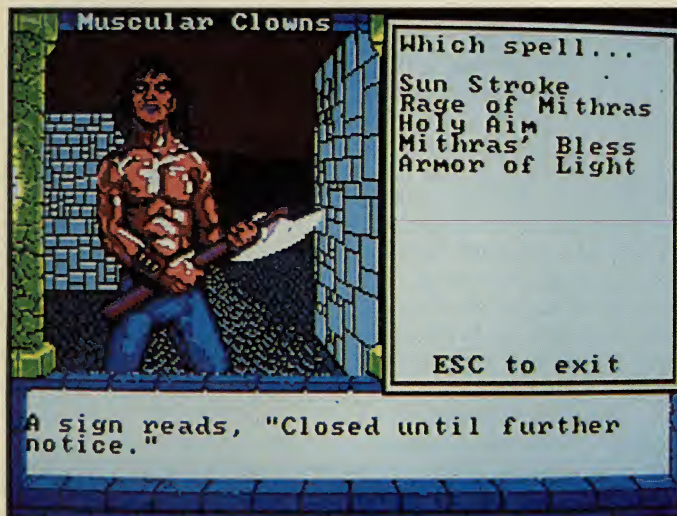




An Earth Man appears in the Mystic Wood. Can you defeat him, or should you run?



Underneath the city of Lansk, the population has gone mad. Watch out — everything here is deadly.



The axe-wielders look a bit tough, but there are only two of them. Jarem, your mage, decides which of his spells to use.



A stone bridge crosses a dizzying chasm. You're leaving some dangers behind, but rest assured that even greater perils await.

Other accessible features abound. At any time, you can press "Shift-?" to obtain a map. Although it's hard to tell which way your party is facing on this map, you can scroll around to see exactly where you are. The map is never denied to you, as in some games, and since it's always there you never have to make a map on your own.

Another feature — and this one is invaluable — is that there are no random encounters. While you can't avoid all combat (and you certainly don't want to), you can avoid some of it by running away from confrontations and not re-entering that area.

In other words, enemies are placed at certain locations (squares) on the map, and they stay there while you go around them. While this is certainly unrealistic, so is the never-ending series of random encounters upon which many role-playing games insist. *Dragon Wars* makes up for the speed and infrequency of combat in the best possible way: it simply gives you more to do than many games.

THE ROAD TO EXPERIENCE

The system for character development also displays a remarkable degree of accessibility. By their nature, role-playing games allow your characters to become more skilled and more experienced. Often, however, advancement means re-



When you're enslaved in the mines, your possessions disappear. They're easily found, but you must unchain yourself before you can get them.

turning to an inn, finding training grounds, locating an advancement committee, or other frequently difficult tasks.

In *Dragon Wars*, an information box tells you when a character has acquired enough experience to advance a level, at which point you need only press "X" (for experience). You use these advancement points to increase your attributes (strength, dexterity, and so on), your skills, or your magical abilities.

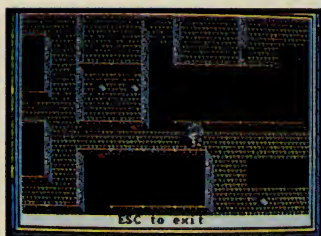
Just indicate the skill you want changed and hit the "+" key; if you change your mind before returning to the game, go to the same line and press the "-" key. You're able to

put your added experience to work immediately, without money or special training; the training has been going on as you've been adventuring.

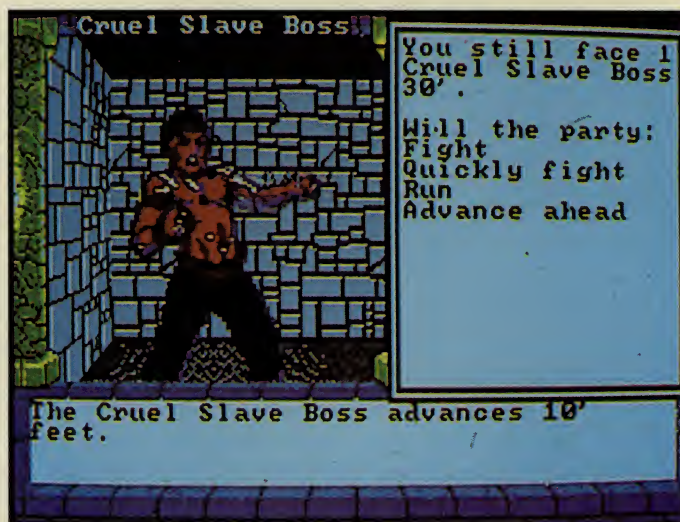
Dragon War's manual warns you up front, though, that advancement in this game is slow. Unlike many role-playing games, in which a character's skill levels and hit points increase dramatically from the start of the game to the finish, your party members won't grow much in *Dragon Wars* — but they don't have to. As you travel, your characters find the items and spells necessary to give them advantages over their enemies, and your



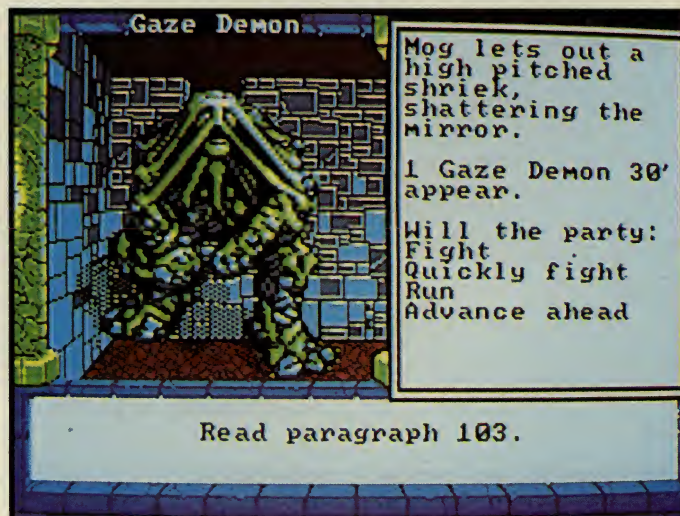
Aha! A source of fresh water. Surely there's something useful you can do with it. Have you met anyone who needs a cupful?



You've explored much of the mines, but there's still a long way to go. Be careful what you do with the items you've found. Once discarded, you can't pick them up again.



This seems like a thirsty individual. Once you're past the slave boss, you've escaped the mines.



Even if you're not sure what a gaze demon is, you should be able to figure out what item to use against it. What else would you use but your mirror?

task is to put these to the best use.

When your adventure begins in the town of Purgatory, you have no weapons, money, or anything else. Before long, you'll find yourself battling unsavory characters and, if you're an experienced role-player, you'll earn weapons and loot from these encounters.

Here, too, *Dragon Wars* is different from other games in its genre. Most battles only yield a few experience points or occasionally a couple of gold coins — never useful things

like weapons, potions, or other treasure. Monsters in this game don't carry 48-foot semitrailers filled with magical swords, gold bullion, and enchanted jewelry. In fact, they usually don't even carry a wallet. To get substantial weaponry, you must survive a thrashing in the arena, and you'll just have to look around for other treasures. Chests, strange though it may seem, are hidden in out-of-the-way places.

Each character has five attributes: strength, dexterity, intelligence, spirit, and power. Generally, the last three are



These statues look strangely lifelike. Perhaps you should examine them for a clue or two.

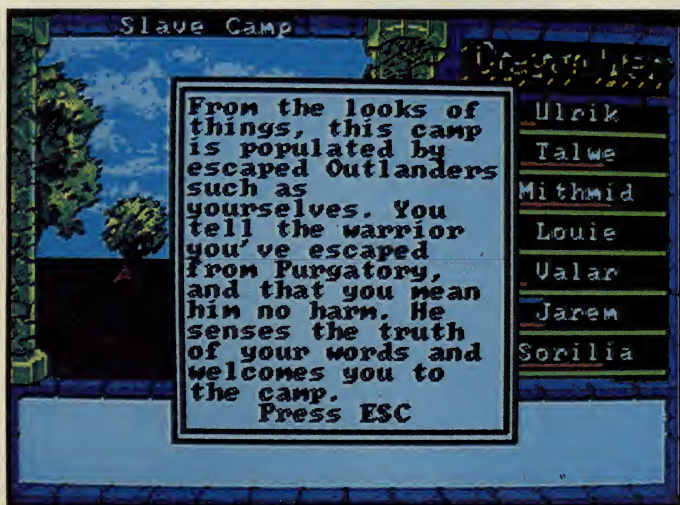
important for spell-casters. Power is the most valuable quality, since each spell costs one or more power points. Unfortunately, power points don't regenerate automatically.

Though you may run across some magical pools in which you can restore your health and power, searching for caches of dragonstones will probably yield better results. Since dragonstones are your only reliable means of restoring power points, you'll constantly run out of them — especially when you start using healing spells. Like power, health is not self-regenerative,

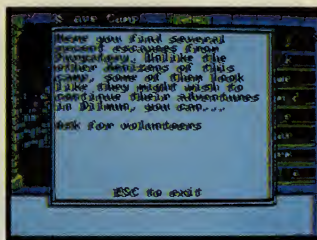
and healing potions are few and far between.

In other words, *Dragon Wars* is as much about managing your resources as it is about fighting bad guys. You can't carry everything you find, and once you discard an item it is gone forever, so you have to determine early in the game which objects you want to use.

Similarly, casting spells can be very effective, but the cost is sometimes prohibitive. The game is more forgiving than most, fortunately, in that almost no item is absolutely necessary to success (e.g., you can lose that magic horn and still achieve your goal), but



By using one of your skills rather than raw strength, you gain the trust of the inhabitants of the slave camp.

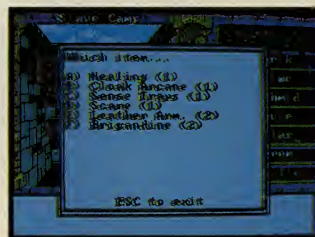


Once in a while, you meet other characters who may be persuaded to join your party. Their unique skills and attributes could prove invaluable.

things can still get very harried at times because there's a lot to do in *Dragon Wars*.

Nine full locations must be explored, four types of magic must be learned, and you must pay close attention to the manual if you want to understand the plot. But *Dragon Wars*'s size is far from intimidating, even considering that you could easily spend several months playing it. The interface is so well-designed, so user-friendly, that booting up the game for even 30 minutes of play at a time is extremely enjoyable. Some actions are a bit too obscure (the bureaucracy skill, for instance), but such obscurity might be the result of trying to keep the game system as simple as possible ... and ease of play is far from the norm in the role-playing medium.

Dragon Wars isn't *The Bard's Tale*—it's better. Single-handedly, this game has established a new way of looking at the *Wizardry-Bard's Tale-Might and Magic* line of role-playing games, and that is certainly a significant achievement.



Here's an extremely valuable chest. Open it, quickly learn the magic spells inside, and then get on with the quest!

GP

Hardware requirements:
512K minimum memory;
VGA, MCGA, EGA, CGA, or
Tandy 16-color graphics;
mouse optional.



Unaware of their fate, Richard and Alison relax a bit while listening to their favorite metal music shredders.

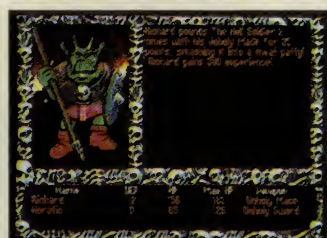
Escape from Hell

GARY MEREDITH

Ever had one of those days where things just started out bad, and then went downhill from there? You know — you lose your keys, you're late for work ... you end up in hell. It seems like a nightmare, but this time it's not a bad dream. For reasons known only to him, Lucifer has spirited you, your girlfriend, Alison, and your buddy, Alan, into the underworld. Separated, you must find each other and escape from the abyss.

In *Escape from Hell*, you discover that hell's not only hot, but it's also a hotbed of dissension. Well, it only figures: If you recruit history's worst villains and scoundrels, then put them in a world where the laws of logic are turned upside-down, you can't expect them to share your opinion of fair play. And it seems that Satan has really got his hands full dealing with such would-be usurpers as Adolf Hitler and Al Capone. But, as busy as the grand master of Hades is, he's still got time to make your life miserable as you journey through his domain in search of your friends.

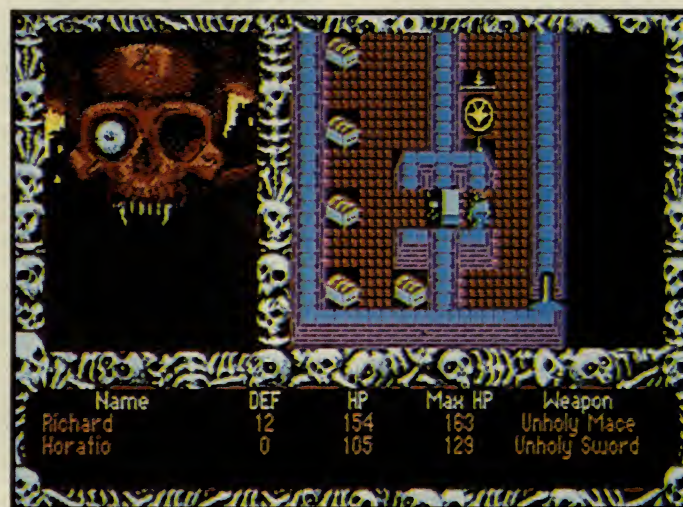
The very fact that you are still alive means you won't enjoy all the "advantages" of the usual hellish existence.



This guy appears to be equipped for close to medium-range combat. But be careful — that spear can do a lot of damage from a distance.



If you loaded up on blood when you were traveling in the southeast section of level two, you should be able to pick up some valuable apparel.



After making a deposit, you should check out the treasure chests behind the teller's cage. The count won't stop you, although there may be hell guards around that will try.

While there are rooms you can't enter and objects you can't use, Satan's minions have free run of the facilities. To balance out the edge that the eternally damned have over you, you need to acquire some companions right away.

Just because you're in hell doesn't mean you can't find some valuable allies. There are any number of "virtuous pagans" (VPs) eager to join in your cause. Of course, you don't want to let just anyone become your confederate. Some VPs are more effective than others — especially those who are already armed and experienced in one or more areas of combat.

If there is a constant in hell, it's that more often than not, anyone you meet is going to be hostile. The hell guards and soldiers are, quite naturally, already out to get you. They work for Satan or for one of the pretenders to his throne. But there are also literally hundreds of hideous beasts and degenerate semi-humans who want to kill you for sheer pleasure. So the sooner your party reaches its full complement of three, the better your chances are for undamned survival.

HELL HATH NO FURY...

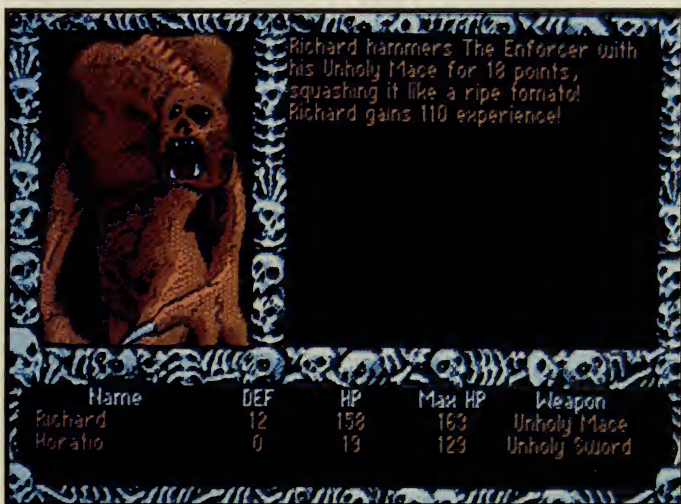
You begin with very little in the way of weapons, but you have the opportunity to upgrade immediately. Often when you



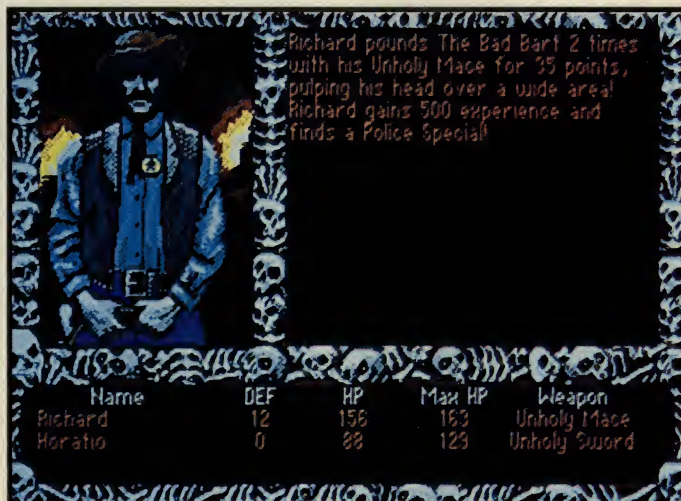
There are some places — such as just prior to entering a new city — where you should really consider saving your game.

defeat an enemy, you acquire his weapon. Then, too, you may come upon treasure chests that contain weapons far superior to what you already possess. It pays to search everywhere — sometimes weapons and other items are hidden in such unlikely places as bathrooms.

There are times when you may need a long-range weapon, such as a dark rifle or an uzi, but these have only a limited number of uses. You're better off if you can find an effective close-range weapon such as a broadsword, or an all-round weapon such as the unholy mace. These have unlimited use and can be wielded by even the most inexperienced fighter (you, for instance).



The most effective short-range weapon you can possess is the unholy mace. The unholy sword comes in a close second.



You may have to take a few hits to get close enough to firearm-equipped monsters, but the police special weapon you get here makes the pain worth it.

Rifles, pistols, and explosives are more deadly, but they also require more training. There are also some areas in hell where these advanced weapons simply won't work. Still, it's necessary to have them since places such as Capone's stronghold can't be taken without some heavy artillery. And in other places, the sleepgrenader or the mark II bomb can

save you a lot of time and personal damage because they work against an entire group.

In addition to weaponry, you can pick up other useful (or useless) articles. Another reason for using all three characters is that you'll need that many to carry all the booty you find. Even using all three, you'll still frequently have to decide what to keep and what to drop. Each person can only carry ten items, and once the limit is reached you won't be able to pick up anything else. Unless you keep your inventory clear of useless or redundant items, you might pass up some very valuable—even essential—objects.

A critical point that's not covered in the instructions is that one of your companions may run off unexpectedly, taking his entire inventory with him. It's usually the third member of the party, and he or she will usually abandon you



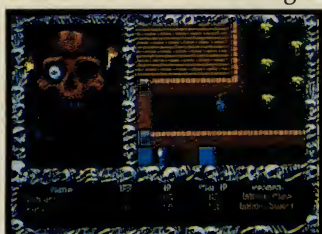
Gremlins don't take much effort to kill, but they usually travel in large numbers. It's possible that they could cause you some damage before you can kill them all.

on the third level, at the entrance to Dachau. So don't give this character any essential equipment to carry, or you'll find yourself backtracking to pick up whatever you may have lost.

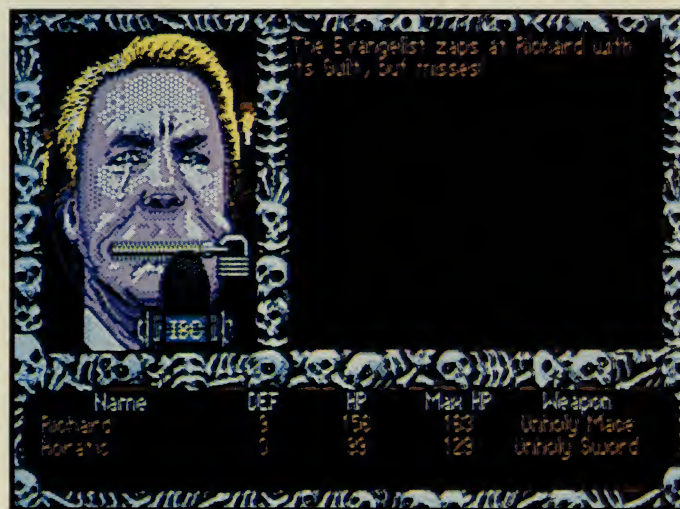
Though there are some articles that you never need, there are others (such as a shovel, sledgehammer, or laptop computer) that are vital. Healing potions and sprays are handy to have around, though not essential; but fairy dust, while quite powerful, has such unpredictable effects that it's nearly useless. Save it for a last resort, since it's as likely to turn your party to stone as it is to transport you to safety.

You should also be on the lookout for any defensive items, such as cloaks, bullet-proof vests, or demonic shields. Many of these can be used together to build up your

resistance to blows and shots. Like many weapons, however, these defensive articles don't last forever, so you must keep an



If you've taken too many hit points, you may want to find a safe place, such as the grove, and compress your healing time by using the space bar.



No one escapes a dishonorable mention in this game, including this passionately purple TV preacher (complete with tears of regret).



Claws and Slashers possess no weapons except for their decidedly deadly claws. If possible, avoid fighting them hand-to-hand.

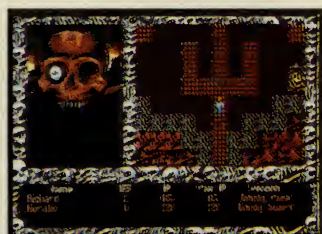
eye on your defense rating for signs of weakening. Everyone in your party should have a defense rating of at least 20 for any major skirmishes; the storming of Capone's stronghold is a prime example.

COME HELL OR HIGH WATER

Even though it seems that everyone in hell is out to get you, there are actually people who can give you valuable information about where to find another character or how to get out of hell. Since even

hell soldiers may be of help, it's not a good idea to battle everyone you meet. (As a matter of fact, the cooperation of one hell soldier in particular is essential for you to reach the second level.)

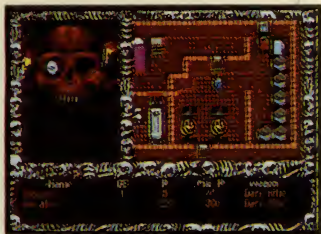
Other characters offer to instruct you in various fighting techniques. One even in-



This is certainly a change for the better. In most of the cities you enter, the vicious and hostile hell guards roll out the red carpet.

vites you to join the hell guards. Take him up on his offer — at least as far as enrolling in the hell guard boot camp. There, you not only pick up pointers in archery, swordsmanship, and lock picking, but you also earn better weapons for your band.

In addition, there's a graveyard in one of the alternate worlds within the boot camp you can enter by touching one of the four tridents inside the training field. It's a treasure trove of useful articles, but only if you remembered to



Your armor and your hit points took a real beating in this battle, but you were finally able to subdue Capone and his entourage. Be sure to smash the mind control machine before leaving.

bring along a shovel.

Most of what you hear from hell's inhabitants is a long litany of reasons why they simply don't belong there. Along your journey, you'll hear practically every hard-luck story in the book. Fortunately, many are quite humorous, with references to philosophical discourses from Socrates to Milton.

TO HELL AND BACK

The landscape of the nether-world includes craggy peaks and boiling lakes of fire, but it's a bit on the monotonous side. After a while, one scene begins to look like any other. For this reason, mapping your way is a good habit to develop early. You definitely should map out the locations of all the cities and caves on each level, but it might also be to your



Insect guards are really tough to kill; fortunately, they usually travel alone or in very small groups.

advantage to pinpoint where the major monsters abide so you can avoid them — or at least make the appropriate preparations for an encounter.

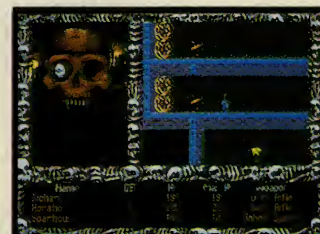
For example, if you're packing dark pistols, but you know that the monster you're about to meet can only attack at short range, you might want to conserve your pistols and switch to hand weapons. Your caution is necessary because all the monsters are reconstituted every time you save and reload the game, so you probably will have to kill a lot of the monsters over and over again.

It's tedious at times, but it's great for your experience point totals.

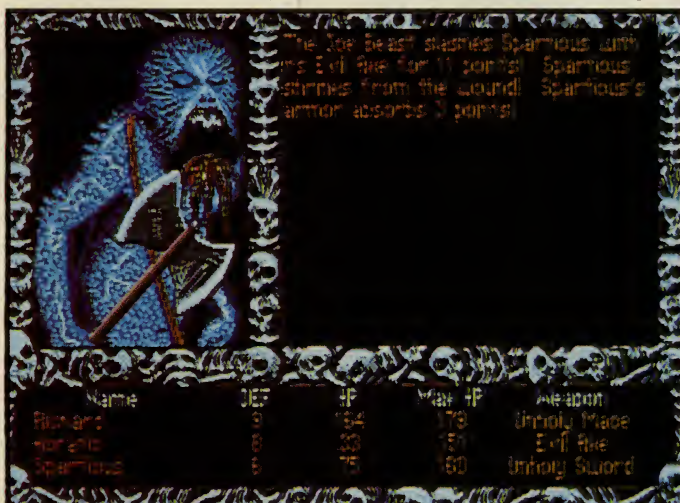
This brings up another important point about *Escape from Hell*: when to save the game. Because of the way the game is structured, knowing when to save is an art to be developed if you hope to succeed. Unlike games where you can save virtually an unlimited number of games in progress, here you can only recall

the last saved game. The first time you save a game poses no problem; but before saving the game again, you should ask yourself (much as the game does) if you really want to save. Often, there might be an item or a character lost inadvertently because you saved your latest game over them.

Something else to remember when saving is that every monster you've killed will be resurrected when the game is reloaded. Imagine that you have just been through a bloody battle with nine slime monsters, five slashers, and six warriors. You won, but just barely.



The teleportation chambers in Capone City can take you to the third level or back to the first level. If you have to go back to the first level, be sure to keep your parachute.



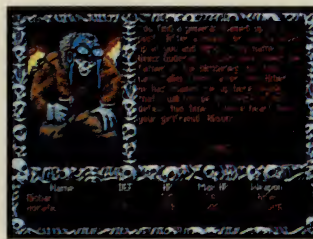
Ice Beasts such as some of the Evil Women can freeze you — even from long range. If your whole party is frozen, it's the same as dying, and you must reload the game.



The Dark Fortress appears to be impossible to reach, but there is a way — as long as you haven't overlooked any items on the second level.



Before entering Dachau, take away any essential items from your third partner. And make certain you've had swimming lessons.



Guderian could be a big help against Hitler and Satan, but freeing him may take more lockpicking skill than you've been able to accumulate so far.



The statue in the Lake of Fire provide instant healing. If you don't possess a laptop computer and a Phreaker Box, you must go back and get them before you can proceed much further.

After allowing time for your band to heal (you can speed up the passage of time by holding down the space bar), you save the game. A few chunks of brimstone down the road, your group is wiped out, so you reload the game. But instead of appearing in the empty clearing in which you were standing when you saved the game, you're once again surrounded by the same monsters you previously defeated. Obviously, saving in *Escape from Hell* requires a little more strategy than most games.

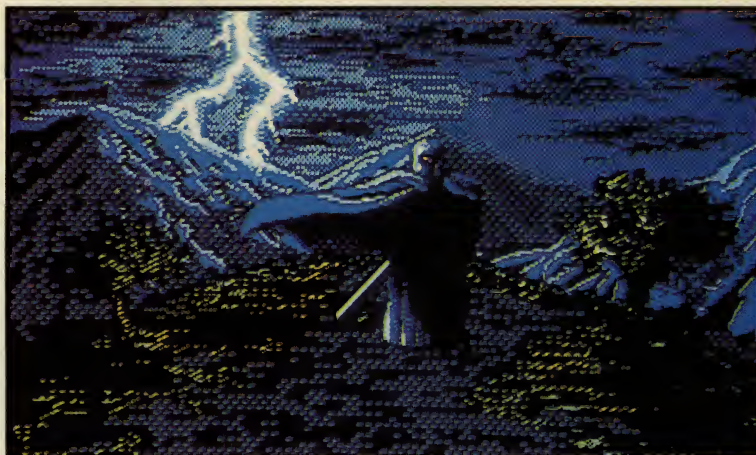
Knowing when to fight, when to hide, and when to run are skills you'll also need to develop. Often, you'll encounter a group of monsters with long-range powers while you're only equipped with swords. You could skip a turn while you re-equip, but it may be more to your advantage to run, and then re-equip. The difference in damage to your party may be small, but it could be critical if one of you is already low in strength.

If you take a few pages from *Paradise Lost*, *Faust*, and *Orpheus*; season them with a dash of Monty Python and a pinch of The Three Stooges; blend well; and then garnish with *The Terminator*, you'll get the flavor of *Escape from Hell*. If you're looking for some laughs and absorbing game play, you won't be disappointed. And, while most new games are geared to VGA monitors and fast computers, it's nice to see a engrossing, original game that those of us with less than state-of-the-art systems can still enjoy.

GP

Hardware requirements: 512K minimum memory (640K for MCGA or Tandy 16-color graphics); VGA, MCGA, EGA, CGA, Tandy 16-color, or Hercules graphics.

Superior EGA graphics give *Knights* a vivid, richly textured look on your monitor.



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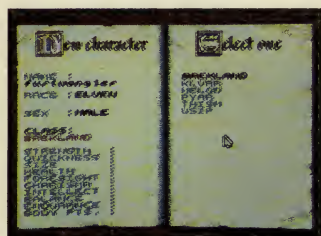
Knights of Legend

WILLIAM R. TROTTER

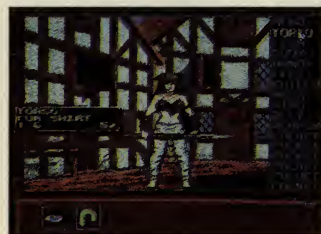
With the appearance of each new entry in the fantasy role-playing genre, the question becomes harder and harder to ignore: Has this genre exhausted itself? Is it a rehashed act that keeps playing to the same shrinking roomful of people? Or is it merely the soft nature of the PC game market that accounts for the "new" fantasy role-playing games (RPGs) that look as if they were designed with 1988's audience in mind, not 1990's?

Consider the problems a game designer must face when setting out to produce a fantasy RPG. The hardcore audience must be appeased, so the list of basic ingredients cannot vary too much from the standard Tolkeinian recipe: an arch-villain with many orcs, trolls, goblins and what-not in his service; a quest whose successful completion will thwart the Evil One's Plans; a questing party comprised of various human and non-human types; a combat system; a list o' spells; and so on.

Therefore, when a game like *Origin's Knights of Legend* comes along, a reviewer can only focus on the wrinkles that make the game look or play slightly different from the others in its genre. At this point in the history of computer gam-



When creating characters, study the various classes and the weapons with which they are proficient. To succeed, questing parties need variety and lots of firepower.



Each character's vital statistics can be accessed by clicking on an icon of a person looking in a mirror. You can also get a portrait view of each character, showing the weapons and armor he or she is equipped with at any given moment.

ing, you can take it for granted that almost any fantasy RPG that makes it to store shelves has got to be a good game, in the sense that it fulfills the basic expectations of a large and fairly stable audience—even if those very expectations work against its being a truly original game.

There's no question about it: *Knights of Legend* is a very good fantasy RPG. Even though it, too, never really departs from



Early game sessions begin at the Trollsbane Inn, where you wake your party from their slumber on the hard disc.



Visit the armorer's shop to invest in some protection. Your money should usually be spent on training and magic rather than fancy armor. Cuirbolli armor offers the best compromise between initial cost, weight, and protection.

the classic formulas, it plays on the sword-and-sorcery themes with such virtuosity that veteran players will find it satisfying, and newcomers to the genre will find it compelling.

QUESTING FOR THE DAY TRIPPER

Part of the game's power (and all of its idiosyncracies) are the result of its being composed by

a single designer, Todd Mitchell Porter, who spent eight years perfecting it. The detail, consistency, and fine-grained texture of the game do indeed bespeak of a passionate and very personal vision.

Clearly, one of Porter's priorities was to design a huge and challenging game while devising for it a player-interface that was elegant, intuitively easy to use, and didn't clutter the screen with lists of commands and statistics. As vast as *Knights of Legend* is (even experienced gamers should plan on investing more than 100 hours to explore the land of Ashtalarea—even without any of the add-on realm modules yet to come), its icon-driven interface is clean, sweet, and blessedly simple to learn.

Does one of your characters need to eat? Just point your mouse and click on an open mouth icon. Time to get some shut-eye? Just point and click on a bed symbol. Need to examine the wares at an armorer's shop? Click on an eyeball. Thanks to Origin's clear, well-illustrated documentation, it doesn't take long to figure out all the necessary mechanics.

Having banished all those wordy lists of commands and stats, Porter has filled most of the screen with some of the lushest EGA graphics you'll ever see. The overhead views of towns feature sharp textures (leafy trees, gravel paths, woven thatch, dressed stone-

work, and on and on), crisp shadows that give a pleasing sense of perspective, and rich architectural details. Closeup portraits of humans and monsters are all full of vibrant personality.

For the creation and equipping of your characters, *Knights of Legend* provides outstanding flexibility and detail. There are 37 different classes of characters, some 30 types of weaponry, and nine classes of armor. You can mix and match, specialize or diversify, trade or experiment. You can also take any item

you're carrying and convert it to cash when necessity or strategy requires it. And one of the game's nicest little "extras" is a sub-program that lets you customize the colors of the characters' garments or the heraldic design of their shields.

THE KNIGHTS CODE

As for the game's overall philosophy, it is generally very player-friendly, but there are times when Porter, following the time-honored traditions of the genre, tries to out-clever the player by making basic goals harder to achieve, and



Buying and selling transactions are smoothly handled by simply clicking on the object under consideration. Data on its price and condition then appears.



One place you'll visit often is the local beanery — but stay away from the pickled orcs' noses.



Potato soup offers a reasonable compromise between nutritional value and cost, and it stays fresh for an amazingly long time in your pack.

important actions harder to perform, than is necessary — or even logical — within the context of the game. Experienced RPG-players have learned to take this kind of thing in stride (and to Porter's credit, he at least keeps the dungeon-mapping to a minimum!), but newcomers to the genre may well gnash their teeth in frustration.

On one hand, the intermediate and advanced levels are designed to incorporate a number of mini-quests — adventures of limited scope, each self-contained and full of particular perils, that are designed to be playable in a single intense session. Players whose real world responsibilities make round-the-clock questing impractical will be grateful.

And yet, getting started on some of those quests is very tricky. Once you've talked to everyone in a given locality, it's pretty obvious which characters can send you on a quest and which are just there for window-dressing, atmos-

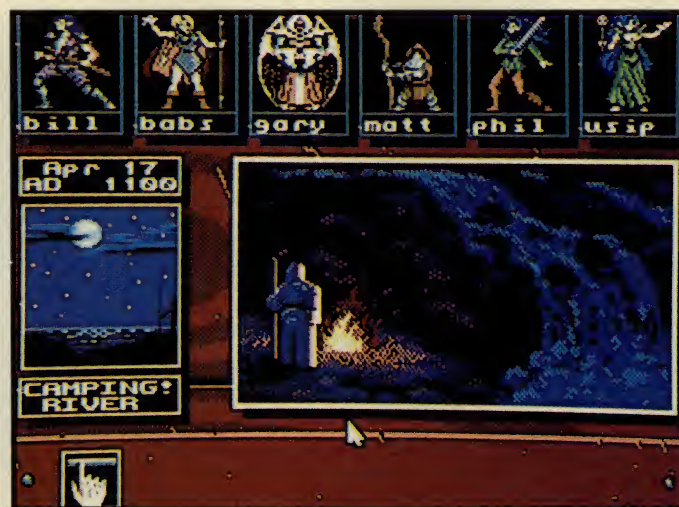


At least one of your party should be a magician. Visit the wizard's tower and buy a few spells before venturing too far into the wilds.

phers, and trading. Typing in logical and relevant inquiries, however, isn't enough to get you started; some discreet hints in the manual would be of great value in this regard, but none are given.

COMBAT REVISITED

At least Porter has re-



thought all the previous systems and come up with a richly detailed and refined system that takes into account just about everything but the characters' basal metabolism. Each encounter is broken down into several stages: maneuvering, offensive action, defensive action, and a final, pre-combat, fight-or-flee stage that might be called the "are-you-



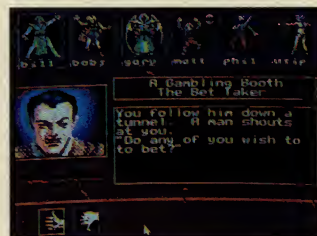
sure-you-wouldn't-be-better-off-running-for-your-lives?" option.

winged Kelden character). Obviously, some of these options get you from one place to another much faster than others, but the faster you go, the more wind and energy it takes out of you. If a moderately strong character wearing heavy armor tries to sprint, he or she might get into action sooner, but be too tuckered out to fight

for very long, or very effectively. There's a trade-off for everything in this game.

Offensive actions include the use of missile weapons, edged weapons, magic spells — even fisticuffs. With edged weapons, you can hack, thrust, slash, or simply go berserk (guaranteed to cause damage both to you and to the enemy). You also have the option of aiming high for the head, in the middle for a body shot, or low for the legs.

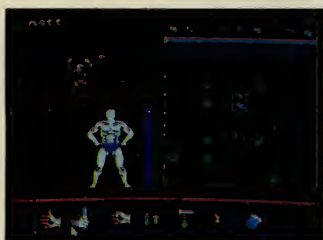
Once you've decided on how to strike, you must choose a means of defense. You can jump back, leap to the side, duck, or simply stand there and trust in your armor (*not* a



It seems to us that every time you bet heavily on your contestant, the computer assigns a deadlier foe than when you either place no bet, or, rather treacherously, bet on the monster instead.

recommended option). Your combinations naturally effect the outcome. It makes little sense, for example, to aim a head shot at a giant, or a low blow at a squat little troll. Likewise, it's all but pointless to hack with a spear or stab with an axe.

As the battle progresses, generic silhouettes on the left side of the screen show accumulated damage sustained by each combatant. A single cut appears as a thin red line; a massive blow shows up as a great red swatch. When the character or monster is covered with gore, death or unconsciousness is near; the only



Arena fights can be tough. Keep moving, inflict damage when you can, and try to wear down your opponent gradually. Remember — there's no time limit.

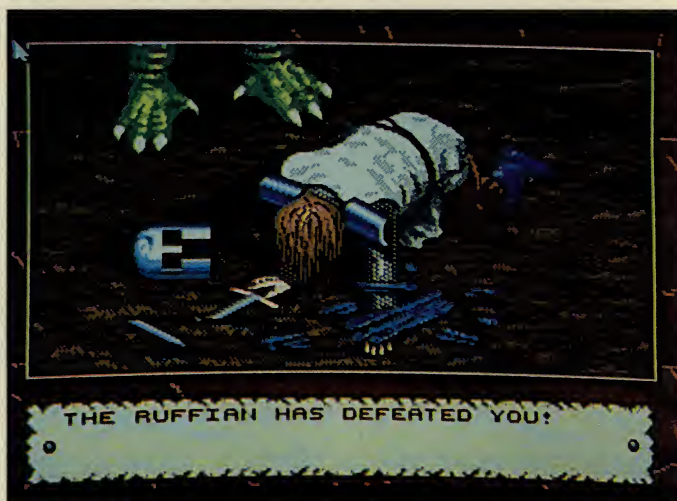
way that fighter can continue is to drop back and click on the Rest icon until some strength returns.

In order to draw and use an edged weapon, you must remember to click on the Unsheathe icon before commencing battle — otherwise, you'll find yourself armed with nothing but your fists (better than nothing! A strong character can sometimes beat a smaller or wounded monster to death with bare hands alone), and the game won't let you draw a weapon once the fighting starts — unless, for some peculiar reason, you were carrying it when the fight started, then tucked it away to blow your nose or something. Nor, rather perversely, will it allow an archer who runs out of arrows to pick up a weapon dropped by an unconscious comrade, even though that weapon is right underfoot.

There are also no terrain features to use to your advantage, no hills or streams to give you a defensive advantage when ambushed by superior numbers of foes. The only ter-



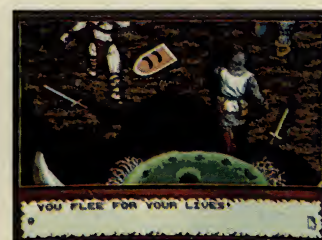
Few things in this game are more satisfying than a triumph in the arena.



Likewise, few things are more discouraging than defeat in the same venue — not to mention the weapons, armor, and gold you'll forfeit.



You'll soon learn which enemies to fight and which to run from.



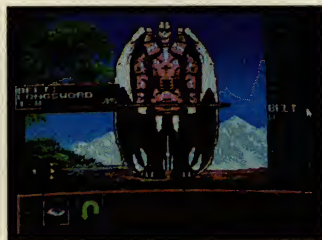
When you elect to flee from a fight, you'll always lose some items — unless you've remembered to sheath your weapons first.



At least one-third of your party should be equipped with missile weapons, one of which should be an elf bow.

rain features of any kind are the stylized trees, and there doesn't seem to be any coherent pattern to them. Some trees give you cover and block movement; others have absolutely no effect on game play.

You'll soon learn which category of monsters can be tackled with weapons alone and which cannot be defeated without powerful magic (in general, you can probably handle humans, elementals, and the undead; stay away from trolls, ogres, and giants until you have specific magic against them — unless, of course, you outnumber them three to one). The Unsheathe and Sheath commands seem nit-picky since they come naturally to rational beings. Failure to Sheath weapons, how-



The Kelden are powerful fliers, but the game — rather perversely — won't let you use them as effectively as you ought to be able to.

ever, means that if you try to flee from powerful monsters, you'll lose most, if not all, of your weapons.

Another quirk in the combat system is that no matter how many hundreds of battles your characters win, they cannot become better warriors through experience. Instead, they must save up hundreds of gold pieces and experience points if they need to become more proficient in their chosen weapons, and make repeated journeys to "training schools" where, for an exorbitant fee, they can take lessons and gain a miserable point or two.

Most enigmatic of all, however, is the proper use of your Kelden characters. The Kelden are the only half-way

original non-human characters you can add to your party, and by all logic, you should be able to use them in combat as tactical air support. They are, after all, big, swift, intelligent, and very strong. Yet, if you try to fly them behind the enemy and have them shoot arrows or hack with their swords while airborne, the results, while not always futile, are usually pathetic. (All that wingspan, and the guys can't even *hover*?)

Whatever Porter's logic may have been, you'd probably do better to use the Kelden as flying diversions — especially if the enemy is armed with bows—and just hope that they get the odd lucky hit while they're drawing fire. To be fair about it, the Kelden do come

in handy on some of the quests, but you *ought* to be able to do more with them in combat.

But for all its idiosyncrasies, some of them endearing, others infuriating, *Knights of Legend* creates an engrossing fantasy-world experience and displays graphics that put most of the genre to shame. Porter and Origin have graced an overcrowded genre with a remarkable game, one that is sure to satisfy veteran role-players and probably make hopeless addicts out of the more persistent and stout-hearted newcomers.

GP

You'll spend a lot of time in old Brettle —training, eating, tending your wounds, shopping, and being saved to hard disc at the Trollbane Inn.



Victory brings adventure points and booty, but usually not much gold. You get that by selling the booty in town.



Hardware requirements:
384K minimum memory;
EGA, CGA, or Tandy 16-
color graphics; mouse rec-
ommended.

Financial Summaries			
Herr Dickie's Fatherland Ex	Cash: £ 325,000		
Track: 441 miles	Bonds: £ 0,000		
Net Worth: £ 5,750,000	Stock at £72.00 per share		
Public: 110,000	Treasury: 0,000		
Czar Nicholas II's	Cash: £ 309,000		
Warsaw & Krakow RR	Bonds: £ 1,000,000		
Net Worth: £ 3,090,000	Stock at £46.00/share		
Public: 80,000	Treasury: 20,000		
Napoleon II's	Cash: £ 775,000		
Trieste & Zagreb RR	Bonds: £ 1,000,000		
Net Worth: £ 310,000	Stock at £5.00/share		
Public: 80,000	Treasury: 20,000		
Charles de Gaulle's	Cash: £ 521,000		
Brussels & Essen RR	Bonds: £ 1,500,000		
Net Worth: £ 2,070,000	Stock at £29.00/share		
Public: 80,000	Treasury: 20,000		
Interest Rates: (Prosperity) 3%			

When you call your broker, you get news of your net worth, financial holdings, and stock values as well as those of your rivals. Rankings are based on this information.

Sid Meier's Railroad Tycoon

MATTHEW A. FIRME

increase the wealth of your railroad monopoly.

FIRST THINGS FIRST

The game casts you in the role of a hopeful entrepreneur with one million dollars in capital to invest in a new railroad. From

there you're on your own, with only a map of the area in which you choose to play (Eastern U.S., Western U.S., England, or Europe), geographically accurate and ripe with resources. From these humble beginnings you must build your empire, battling competing railroads,



As you lay track across the expansive European continent, you must be prepared to build a few bridges.



You get to watch your crew carry out your orders in one of the game's many animated sequences.



With the area display, you can keep an eye on how shipping is progressing at all of your stations at once. The blue shipping boxes show cargos available and cargos needed.

Sid Meier's Railroad Tycoon is a simulation of rare complexity. It re-creates the rise of railroad-ing as it became perhaps 'the most powerful single industry in the world. The game is thorough and constructs a world so complete and so involving that you'll probably have trouble turning off your computer.

Yet to its great credit, Railroad Tycoon never becomes bogged down by its considerable detail. Thanks to thoughtful program design and documentation that's entertaining and informative, Microprose's Railroad Tycoon achieves an impressive level of reality without sacrificing playability.

Railroad Tycoon simulates nearly every aspect of the rail business: You must survey land to find the best route for a new line; studying the resources of an area, linking supply and demand. You compete with other railroads, racing to lay track into the growing cities in your area. You also have to foster new industries, carefully planning and positioning track to take advantage of a factory's goods.

Attracted by such industrial opportunity, settlers will flock toward the stations you build along your railroads. The markets they create for passenger and mail transport further

playing the stock market — even buying the competition, siphoning cash from it, and taking over its routes.

But first you must choose an area in which to lay your first track. If possible, select a location near two cities with large populations and plenty of industry and resources. You should lay track between the two, trying for the shortest route. Then you purchase a locomotive, choosing from the models available at whatever time in history you begin (the game covers over a century, from the 1820's through the 1960's, and the year in which you begin depends on whether you're playing in the U.S. or abroad). Next, you have to plan your train's route, ordering it, for example, to pick up coal and mail in Washington, D.C., and transport those goods to Richmond, where you would pick up loads of steel and wood and return to Washington.

Of course, things grow progressively more complex as time passes. Eventually new locomotives are invented, making faster transport of larger loads possible. You'll often find yourself running low on funds and having to raise some quick cash to complete a new track. Cities grow, increasing the demand for passenger and mail service, while resources may dwindle, industries close, or a flood destroy one of your bridges. These and other eventualities force you to



THE ANSWERS YOU NEED

FILL OUT AND MAIL IN THE SUBSCRIPTION CARD TODAY

change your business strategy, rerouting trains, changing cargos, retiring some lines, and laying new track elsewhere.

Fortunately, the mechanics of the game can be mastered quickly. The interface designed for *Railroad Tycoon* (which uses the keyboard alone or both the keyboard and mouse) is simple and intuitive. You can access information on any specific train or station on your railroad by clicking on it, and the screen scrolls to follow your pointer as you move toward the edges of the main display.

This main display, an overhead map showing a chosen region and featuring the animated comings and goings of your trains, can be tailored to display nearly any in-

formation you desire. At the beginning of the game, you're shown the "regional display," a map of the entire play-



The box at the bottom right shows a representation of each of your trains as well as the cargo they're carrying. Click on it to see specific route information or issue new orders to any of the trains.

ing area. From this you can zoom in to the "area display" or the even more detailed "local display."

Both emphasize railroad features over natural terrain, showing your tracks, stations, and the cargos waiting at those stations. There are also resource and surveyor maps of the area which you can toggle on and off. The resource map is a very valuable feature which summarizes supply and demand, highlighting areas with surplus goods or resources as well as the areas where those items are in demand. The surveyor map helps you avoid laying track uphill (which slows down your trains) or having to construct costly tunnels or bridges.

The "detail display," the



The detail display shows the land more accurately than the area display. Notice the double tracks around Regensburg; these allow more trains to serve the large city and reduce delays as trains move in and out.

one you'll probably use most often, is a tight, topographical view of the land, the closest view you can get. This display, which shows mountains, swamps, villages, ports, cattle ranches, and so on, is the one to use when deciding where to lay tracks. It also affords the clearest view of your tracks and trains, an important consideration if you need to alter a train's route or cargo quickly.

Railroad Tycoon supplements these main displays with many animated and still graphics, all very nicely executed. Whenever you build — a new station, a bridge, or a train — you see your orders being carried out. A new station is shown in closeup, com-

plete with newspaper headlines celebrating its opening. Bridges are built according to your specifications, and you get to watch the workmen hurriedly laying beams and track, bracing the structure, and finally leaving the completed project. And when you call for a new train, it is wheeled out of the engine shop for your inspection.

Other graphics appear automatically during play. Any "first" on your line — the first train to arrive in a new station, the inauguration of coal, food, or mail service — is celebrated with a view of the event and newspaper headlines proclaiming the joy of your customers. And at



Here's the Terminal at Reims — one of the true architectural masterpieces of Europe. Terminals are the largest stations in the game, influencing a large portion of the surrounding countryside.

times, newspaper headlines flash over the main display. These give information on your competitors or the economic climate that may influence your current decisions and long-range plans. News that a rival has run new track into a city or area helps you stay alert to the competition, while word of growing labor violence may signal an economic recession, prompting a

Every two years of game time, the fiscal period ends and a series of displays assess your performance. These displays tell you how much your operating costs were, how much revenue your railroad took in, and what types of cargo earned the most money. You also sometimes receive messages about individual trains in need of attention, such as "Train #3 received no maintenance," or



Often you need to build a second station near a larger one to take advantage of all the available resources. This new station near Stuttgart quickly pays for itself by bringing in new revenues.

reassessment of your investments.

Should you want to look into your holdings, you can place a call to your broker, selecting the option from the pull-down "action" menu. This brings up the financial summaries display, giving you information on your stock holdings, those of your competitors (there can be up to three competing railroads), and the current value of all stocks. From this screen you can buy or sell treasury stock, stock in competing railroads, and sell or repay bonds. Of course, in keeping with your tycoon-sized ambition, you can only deal with stocks in blocks of 10,000 shares and only buy or sell bonds in \$500,000 increments.

"Train #1 produced no revenue." These items should be corrected as soon as possible. A train in need of maintenance has very high operating costs, and a train that's not producing revenue is nothing but money down the drain.

One of the most important components of the fiscal report is the ranking it assigns to you and your competitors. Based on the value of railroad stock and the company's net worth, the ranking can be influenced by many factors — from a company's amount of ready cash to the number of outstanding bonds it has to the miles of track the line has laid. Next to each company is a picture of your fellow tycoon, its owner. They are all real figures, men like J.P.



You'll often make the headlines as you build your empire. The largest newspapers in the nation jump all over themselves to praise your accomplishments.

Morgan, Cornelius Vanderbilt, and even Benito Mussolini. Beating men like these at their own game is an enormous pleasure.

There are three distinct economies at work in *Railroad Tycoon*. In the U.S., for example, grain is carried to food processing plants to be converted into food. In England, grain is the raw material of beer. And in Europe, grapes replace grain and are processed into wine. Similar regional distinctions affect livestock, steel, and so on. Even the closeups of stations reflect these differences, adding real flavor to the game's locales.

MORE POWERFUL THAN A LOCOMOTIVE

With the enormous variety of transportation options available today, it's easy to forget just how powerful the railroads were during the eras covered in *Railroad Tycoon*. More than just rail-bound public transit, the railroads quite literally built countries. A town linked to the rest of a nation by rail could grow to a city. A series of such cities, connected by a strong rail system, could transform a territory into a state. Industries like steel, textiles, and manufacturing were dependent on rail service both for raw materials and distribution. These relationships made many railroad



Over the course of the game, your influence on the cities you serve will be very apparent. Buffalo was only a village until the railroad came, bringing the people and industry that fueled its growth.

owners among the most powerful men in the country.

But before you can climb to the top of the industrial power structure, you must start a simple, profitable railroad. To do this, you must understand that it's not locomotives that drive a railroad; it's supply and demand.

Regardless of which of the three economies you deal with, your first task should be to scroll around the map, searching for an area with a good supply of raw materials. If you find an area rich in coal, for example, then it's important that you be near a resource that needs coal — such as a steel mill. By laying track between the two locations and running a train from one to the other, you're initiating an interde-

pendent chain of supply and demand that relies on your railroad for transportation. Not only do you earn revenue by

hauling the coal, but you've also helped create a second resource — steel — that can be transported to a factory or other third location and converted into manufactured goods.

In this way you build your fortune. Beginning with that first load of coal, you must see to it that you not only earn a fee for the initial delivery, but that you deliver the cargo to a station capable of converting the coal as well. This insures that you have another opportunity to earn a fee, this time transporting steel; and again you can guarantee that the steel delivery leads to yet more revenue, this time hauling manufactured goods.

The key to success as a tycoon lies in developing an eye for such opportunities,



Don't forget about your stations once you've built them. It pays to make improvements — all of which can boost your revenue and net worth.



This hotel built in Youngstown, Ohio, helps to increase the revenue you earn from passenger trains.

then adjusting your rail construction and transit orders to take advantage of the situation. Ideally, no train on any route should travel empty. Each stop your train makes should earn revenue with the delivery of goods and allow that train to load up with other cargo, insuring further profit.

Different factors in *Railroad Tycoon* can override the importance of the "full load" rule. The most obvious of these is time, which logically affects many of your cargos. Each of the possible cargos is divided into one of five freight classes, and each class earns revenue based on the sensitivity of the cargo to speed of delivery and distance traveled. Mail is most sensitive to time and distance; therefore, it's best to move quickly from stop to stop with whatever mail is available at a station — even if you end up hauling only a portion of your capacity. If you wait for a full load, your cargo will become less and less valuable. No one wants yesterday's news, and as the demand dwindles to near nothing, so do your profits.

On the other hand, bulk freights like coal and cotton are not at all time sensitive. Neither spoils with time, and both are as valuable to customers in the next town as in the next state. Therefore, you are paid a flat rate for delivery of these cargos regardless of

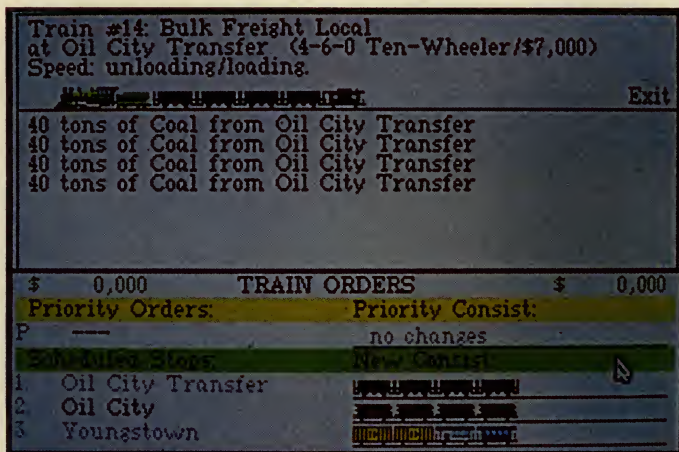
the time it takes to deliver them. So it makes sense to move bulk freights in as large a quantity as possible, even ordering your train to wait at the station for a full load.

It also pays to be aware of the differences in freight classes, carefully combining cars in a train's cargo. Knowing when to wait for goods and when to sprint ahead to the next station, or when to combine mail cars and coal cars goes a long way toward maximizing your railroad's profits.

It is vital that you know the sphere of influence of each of the stations on your railroad. When you order each station to be built, a grid of rectangles appears over the construction box, the point on the map where you build. These represent the four types of stations you can build — signal tower, depot, station, and terminal — and the area around each that will contrib-

2-8-0 Consolidation			
Maximum Speed 40 mph Power at Drawbar 2500hp Price \$40,000			
Rated Train Speed / %Grade			
1 CAR:	40 mph (0%)	40 mph (2%)	32 mph (2%)
2 CARS:	40 mph (0%)	30 mph (2%)	24 mph (2%)
3 CARS:	40 mph (0%)	22 mph (2%)	18 mph (2%)
4 CARS:	32 mph (0%)	18 mph (2%)	14 mph (2%)
5 CARS:	32 mph (0%)	16 mph (2%)	12 mph (2%)
6 CARS:	24 mph (0%)	14 mph (2%)	11 mph (2%)
7 CARS:	21 mph (0%)	13 mph (2%)	10 mph (2%)

Every few years a new locomotive is invented. The new trains aren't always better than the older models; some offer increased speed at the cost of horsepower, and some horsepower at the expense of speed.



When ordering a new consist (the cargo your train is carrying), try to keep loads in the same freight class together.

ute cargo and purchase goods. An easy way to think of it is that the larger the facility, the farther people are willing to travel to bring goods to your railroad. Anything within the rectangle falls within the influence of that station.

You can seed your routes with opportunities to make even more profit by building along your route. In some cases, you might find yourself unable to process all the coal you can carry from a particularly rich mine. In this instance, it would be a wise investment to build a steel mill yourself, carefully placing it within the range of influence of one of your stations. This might necessitate expanding a station to a terminal, but it will pay great dividends in the future and add to the net worth of your railroad.

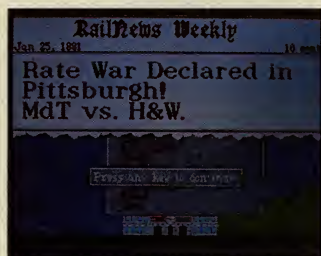
TIMID TYCOONS FINISH LAST

So many subtleties come into play as you strive to build your empire that it is simply impossible to touch on them all. Any option which doesn't violate the basic rules of the game is open, and the complexity of the economy, aggressiveness of the competition, and control of the trains themselves can be changed to suit your experience and competitive spirit.

However, one basic tenet of the tycoon mentality is always true: It pays to be aggressive.

As you carefully monitor your operation for ways to save and increase your revenues, remember that you are playing a game that can span over a century. Don't be afraid to spend — even to go deeply in debt — for long-term profit and growth. If your small operation in northern Ohio doesn't risk expansion into Michigan and Canada, you can bet that a competitor's trains will beat you there. And even when you are earning a satisfying living from your five-train railroad, don't hesitate to double your tracks and buy three more trains if there is cargo left waiting at a station. You'll better serve your customers, who in turn will expand their cities and bring you more business.

Be more than aggressive with your competitors. You

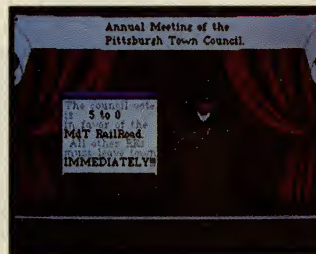


If you run track into a competitor's station, you initiate a rate war. Both you and your rival must slash fares and rush to service that town's needs.

should be ruthless, buying them out, stopping their growth, and taking their profits. Go ahead and run your line right into the station of a competing railroad. The resulting rate war makes both you and your rival cut rates in half and run every available train through the disputed station. The townfolk allow this for two fiscal periods, then they judge which railroad served them best and order the other out of town. Do whatever it takes to win — even buying new, powerful locomotives just to serve that town.

It will be worth it when you win; when the other guy is driven from the station he built, leaving it (and the resources around it) to you. You then have a monopoly — and you can make those townsfolk pay double your normal rates.

Unlike many simulators, which offer only a kind of "hands on the wheel" experience, *Railroad Tycoon* gives you a real and complete feel of control in a very complex situation. It gives you control as total as a real J.P. Morgan would have enjoyed, even approaching a *Sim City*- or *Populous*-like omnipotence. Yet it gives this depth of experience without becoming mired in its own scope. *Railroad Tycoon* is clearly one of the best simulations of any type — indeed, one of the best games in general — to appear in a very long time.



By diverting as many of your trains to Pittsburgh as possible, you can out-perform your rival over the four-year period of a rate war. The railroad that best served the city gains exclusive rights to that station.

Hardware requirements:
512K minimum memory (640K with VGA); VGA, MCGA, EGA, CGA, or Tandy 16-color graphics; mouse recommended.

GP

Balance of the Planet

Game Options Help Quit

Nuclear Research Subsidy
6.00 %

This is your Ministry for Nuclear Research. You can increase its production of new budget, but only if you have budget percentage available to spare. Although you can change the numbers now and see immediate effects in the live context, the effects in the world will not take place until you Eminate Policies.

Policies

Game

excellent 136-page manual, don't be discouraged if at first your efforts result in low scores and an environmental mess. Just remember that the environment is a cause-and-effect balancing act.

9 Climate

Balance of the Planet

CLIMATE

The exhibit was most representative of the accumulated studies of natural scientists, the exhibit was somewhat more of a work of imagination. It was a display of scientific data, but it was also a work of art. The exhibit was a work of art, but it was also a display of scientific data. The exhibit was a work of art, but it was also a display of scientific data. The exhibit was a work of art, but it was also a display of scientific data.

The game opens with a screen labelled Results For 1990. The player returns to this screen after each five-year turn. On the left is a list of positive points such as biodiversity, forest life, marine life, and sustainability. On the right is a list of negative points such as land abuse, skin cancer, radiation waste, and starvation. Your goal is to increase the point totals on the positive side and decrease those on the negative side.

Another important screen is the one labelled Policy Summary, which shows such sources of revenue as the beef tax, the CFC (chloroflourocarbon) tax, and the natural gas

This is not a game that will have you hanging on the edge of your seat in suspense, nor is it necessarily relaxing escapism. What Crawford has done is compile a tremendous amount of information con-

Balance of the Planet

QUALITY OF LIFE

The quality of life is the fundamental material component of human happiness. The degree to which you improve the quality of life for all humanity is

The game player moves among 150 screens of environmental information, peeling away each topic like the layers of an onion. What are the connections between such topics as riparian habitats, heavy metal use, ozone, oil spills, and solar energy? *Balance of the Planet* makes it inescapably clear that these issues and many more are indeed fundamentally connected.

ers, parents, and bright students is admirable. I can't imagine a better classroom aid for teaching environmental issues than *Balance of the Planet*.

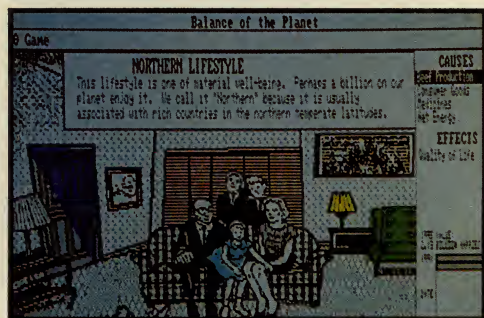
Crawford is best-known for designing such computer games as *Eastern Front*, one of the first military strategy computer games, and the attention-getting *Balance of the Planet* and *Balance of the Planet 1990*, geopolitical strategy games. Based in Milpitas, California, he has a reputation for thinking creatively and deeply about computer game designs, a reputation that is enhanced by this latest effort.

Balance of the Planet is based on a simple idea: As the United Nations' High Commissioner of the Environment, you have the power to levy taxes and grant subsidies to a wide range of businesses, environmental efforts, special issues, and the like in order to improve the Earth's increasingly ravaged environment. The policies you adopt through your taxation and subsidization set in motion an ever-increasing number of ripple effects throughout the world.

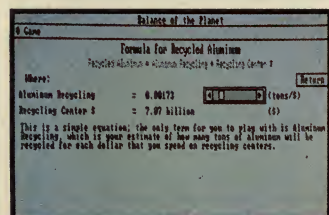
You have nine turns in each game, with each turn representing five years. By the year 2035, your point totals indicate your relative success or failure. As Crawford points out in the



The destruction of the Earth's forests is one of the most controversial and dangerous environmental problems.



The richest humans on the planet tend to be concentrated in the northern temperate latitudes. What is good for their material well-being is not necessarily good for those elsewhere on the planet.



Playing with the formulas in *Balance of the Planet* can give you a much better understanding of the complexities of our environmental problems.

tax as well as funding expenses such as bioresearch, nuclear energy, solar energy, and dam use. You set your policies by increasing or decreasing specific revenue sources and specific subsidies. For example, Crawford states in his manual that you'll almost certainly want to tax CFCs heavily, since they have been implicated in the loss of the Earth's protective ozone layer. At the same time, you may want to increase your subsidy for solar energy or for nuclear energy — depending on your priorities.

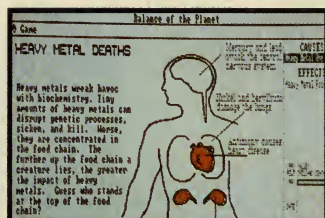
As you begin to set your policies, you move from the Results screen by choosing a topic you want to investigate in more detail. You might start by selecting Heavy Metal Points (metal toxins such as lead poisons, not Motley Crue!). A screen appears that informs you that you must take responsibility for deaths related to lead

and other metal toxins. From the Causes menu of that screen, choose Heavy Metal Deaths and you get a screen showing information on different forms of heavy metal deaths.

Selecting Heavy Metal Use then leads to Heavy Metal Tax, and you

can decide whether you want to increase or decrease heavy metals taxes. There are also other paths which lead to such topics as water pollution, the price of heavy metals, and industrial input. Remember, every action you take has multiple effects. For instance, what effect would increasing the tax on heavy metals have on the economy in relation to industrial costs? Contrarily, if you decrease the tax, the expanded use of heavy metals may raise toxicity levels.

And so it goes throughout *Balance of the Planet*, as you move from topic to topic, learning a great deal about a host of environmental topics while you make decisions about them. In addition to the substantial amount of information presented on the game screens, almost 100 pages of Crawford's manual is devoted to one-page overviews of the major topics



As High Commissioner of the Environment, how will you respond to the problems posed by the increasing number of deaths related to heavy metals use?

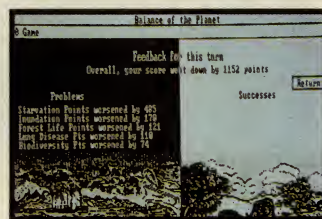
under consideration — from acid rain and beef production to ultraviolet light and water pollution. The game and the manual combine to produce a short course on the central issues facing us all.

A computer game that tries to address a topic as complex and as controversial as the environment will inevitably be criticized as somewhat simplistic and biased, and to some extent that has to be true. However, Crawford has built into the game options to change not only the bias he brings to the game, but also the fundamental mathematical formulas on which *Balance of the Planet* is built.

There are built-in pro-nuclear, environmentalist, industrialist, and third-world biases that you can choose; by changing the equations within the game, you can create your own personal bias. As Crawford

points out in the manual, letting players adjust the values underlying the game not only solves the bias problem, but forces players to examine their own values as well.

Balance of the Planet is a sprawling, information-laden computer game that makes an important contribution in raising our awareness of and knowledge about the environment. Don't purchase this game expecting an escapist romp or similar light entertainment. It's an intriguing and painless way for thoughtful game players to grapple with some of the complexities of our endangered Earth.



After each turn you can check the results of your policies. Don't let your problems outnumber your successes, or the world and everything in it will suffer.

Hardware requirements:
512K minimum memory;
VGA, EGA, or CGA graphics;
mouse optional but recommended.

GP

BUDOKAN

GARY MEREDITH

The life of a warrior is not an easy one. Too often, common thieves desire to test their mettle, only to become food for crows after a swift judgment from your *odachi*, or long sword. You have been a lifelong student of *budo*, the "way of the warrior," which emphasizes the value of martial mastery in developing inner strength.

Too often lately, it seems, you are called upon to deal more in *bujutsu*, the warrior techniques, as your ancestors did in the far less peaceful years



The courtyard of Tobiko-Ryu Dojo seems quiet now, but the halls are swarming with young students aspiring to learn the way of the samurai.

before the reign of the Tokugawa. Such are the times. But, did not old Hayashi, master of the dojo, always speak of the need for the values of

the samurai when the times were most bleak?

Do we need the virtues of integrity, loyalty, and self-discipline any less these days? *Budokan* won't make you a master of *budo*, but it may just give you some insight into a philosophy born in an era many Japanese today regard as the golden age of their civilization.

In spite of the frequently rather violent nature of computer games, *Budokan* manages to evoke a rare contemplative spirit. You can play it as an excellent action game, with enough variety to satisfy anyone. But you can also take the time to study the philosophy of *budo* as it relates to the martial arts. Approaching the game from this angle can make it a much more rewarding experience.

As the Electronic Arts game begins, you are a new

student in Tobiko-Ryu Dojo, one of the many schools which dot the Japanese countryside to this day. The *ryu*, or school, offers instruction in four basic disciplines of the martial arts: karate, kendo, nunchaku, and bo. Along with the physical training, there is the philosophical basis of the samurai, dispensed with an understanding of human failings by the venerable teacher, Tobiko-Sensei.

A basic tenet of *budo* is the concept of *ki*, the essential life force that flows around and through us all. The true master of *budo* is one who has learned to focus *ki*, so that understanding and growth might follow. Channelling *ki* is essential to martial success as well. When going through *kumite* (sparring), or on the mats of Budokan, the management of *ki* is as important as your moves.

The warrior who waits longer before attacking accumulates more *ki*, and the more *ki* accumulated, the more power his blows have. So, it's obviously wise to avoid simply wading in, flailing your weapon, and hoping you'll hit something before it hits you. Patience is rewarded.

From time to time, you have the opportunity to speak with Tobiko-Sensei, and to gain from him a greater knowledge

The master, Tobiko-Sensei, is wise in the ways of humans, and will guide you along a path others have followed for many hundreds of years.



All other training derives from the disciplines of karate, where quickness and concentration are finely honed.

of the samurais' way. He also watches over you as you practice and spar within the various disciplines, and his critiques help you find areas in need of improvement. Listen to him and you'll be rewarded. The master is most concerned, as you might imagine, with the focusing of *ki*, but he's not above berating you for abusing your weapons.

Upon entering a training area, the first thing to do is familiarize yourself with the moves of your weapon via the *jiyu-renshu*, or practice, option. There are so many actions to master within each discipline that you'll probably spend a lot of time with *jiyu-renshu*. Each movement must become second nature, so that you can conserve and focus *ki* once you take on human opponents.

When you feel comfortable with each discipline, you can begin sparring with other students (either a friend or the computer) of varying abilities. In addition, there is a free-sparring mat located in the upper

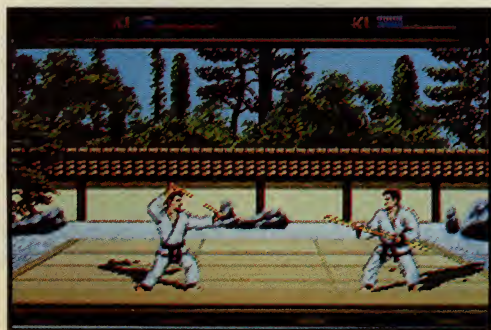


Kendo was developed as a training substitute for the deadly *odachi*, or Japanese long sword. Intensive practice sessions, called *kata*, provided experience for *kenjitsu*, the use of the sword.



left corner of the courtyard where all the students go to sharpen their skills before venturing into the Budokan. And you'll need all the sharpening you can get to do well against the 12 opponents you must face in that famous arena.

While still practicing amid the comforting confines of the Tobiko-Ryu Dojo, make sure that you work with all the combinations of weapons possible. That is, try karate against kendo, *bo* against nunchaku, *bo* against karate, and so on. This will prepare you, at least partially, for what you may face in the arena of Budokan. There, students from other schools compete with weapons, such as the *kusari-gama* (a weapon with a sickle on one end and a chain with a lead weight on the other) or the *naginata* (a tall shaft with a curved blade at each end), which are not taught at Tobiko-Ryu Dojo. Many of these, along with the nunchaku and the *bo*, are from the Okinawan schools, where weapons instruction, in addition to hand combat, flourished.



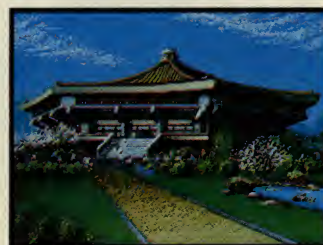
The sparring mat is a less formal way of increasing your experience in anticipation of your eventual appearance before the crowds of the Budokan.

Originally, the Okinawan schools taught only karate (literally "open hand") because only the mainland samurai could carry weapons. However, they eventually expanded the curriculum to include metal and bamboo weapons. Some items, such as the *shuriken*, were completely rejected by the samurai and martial students alike as cowardly and worthy only of the despicable and dishonorable *ninja*.

Budokan's interface is very smooth and helps to create an effective illusion of martial combat. While you may play with either the keyboard or the joystick, you'll probably find that the joystick is easier. Because some of the moves are rather complex, there's a danger of tying your fingers in knots if you're using the keyboard. Something that may or may not be a problem is a bit of a lag when using the joystick. This, however, varies according to the make of the joystick, so if you've got a good quality stick you shouldn't have a problem.

You'll also want to have VGA graphics and a fairly fast computer to get the most out of *Budokan*. While the game is enjoyable in EGA, and even acceptable in CGA or Hercules graphics, it truly comes alive with 256 colors and a fast processor. The delicate shading lends an atmosphere of rice paper and bamboo to the entire game.

If there is such a thing as a gentle martial arts game, *Budokan* is it. While other games may feature battles (or, worse yet, simple gratuitous violence), *Budokan* maintains the approach to martial arts as they've been taught in Japan for hundreds of years. Once relative peace fell on Japan, the teachers of budo came to see martial studies as a way of mastering yourself in the face of all the external world might throw at you. So, young one, you've made the decision to enter the training hall, and you've spoken to the master of your desire to become a true samurai. All that's left to say is *hajimae* — begin.



The dream of every Japanese martial arts student is the opportunity to prove himself against the toughest competition from other schools in the Budokan.

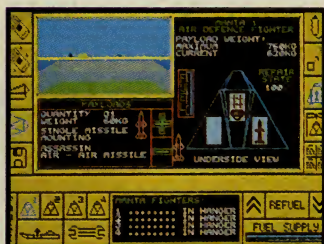
GP

Hardware requirements: 384K minimum memory (512K for VGA or MCGA graphics); VGA, MCGA, EGA, CGA, Tandy 16-color, or Hercules graphics; joystick optional; supports sound boards.

GARY MEREDITH

With the easing of international tensions, at least in eastern Europe, it would seem an apt time for the world to step back from its fears of global domination by any one country or political philosophy. Still, there are places engaged in a near-eternal battle against tyranny. Fortunately for everyone, these places reside in the memories and disks of our personal computers, where the ultimate in disaster is nothing more than a crashed hard drive.

There are a number of games on the market dealing in the intricacies of international war, but one that has been relatively overlooked is *Carrier Command*.



Configuring a Manta for its mission takes some thought. The differences in armament between ground attack and aircraft interception can be considerable.

Carrier Command made a big splash in Europe when it was released several years ago, earning high accolades from the press there. But Rainbird, its publisher, never had the resources to give the game a big push in the U.S. Now, under the Microplay division of MicroProse, *Carrier Command* is back, and it definitely merits consideration by fans of both strategic wargames and combat simulations.

The basic premise, as with most wargames, is simple. You have territory, the enemy has territory, and between the two of you lies a lot of real estate that's just ripe for picking. In this case, the real estate is a distant planet covered with islands. However, conquering an island is only the beginning of the process for you or the enemy. Once you've acquired territory, you must decide what to do with it. Should you make

it a manufacturing facility, a source for raw materials, or perhaps a defensive bastion? And how should you connect your islands so they'll be interdependent? Of course, while you're mulling over these problems, you still must develop a battle strategy for the next island.

To make matters even more complicated, you also have to worry about the day-to-day operation of your attack carrier — from weapons stores and fuel supplies to maintenance on the ship, the aircraft, and amphibians. Taken simply as a strategy game, *Carrier Command*'s closest competitor would probably be *Interstel's Empire*, another game in which you have a distant, unexplored world to conquer. But *Carrier Command*, unlike *Empire*, includes a very good combat simulation in the bargain.

On board your attack carrier, you have at your disposal four Mantas, powerful fighter-bombers, and four equally deadly amphibious attack craft



Once you've neutralized any air defenses, taking out an island's communications and its fuel depot should be your first priority.

called Walruses. Both types of craft can be loaded up with a wide variety of weaponry designed to fit specific mission profiles. Once you've got your machines loaded up and ready, you launch them (the graphic sequences are quite good), and then either control them manually or set them on predetermined courses and missions. In the automatic mode, you can have all eight out at the same time, although it's a wise commander who keeps a couple of Mantas in reserve for defensive purposes.

The real kick, however, is taking one of these machines out for a run on manual control. Ground attack with the manta is especially fun; good EGA graphics combined with



Fortunately, Manta takeoffs and landings are automatic, provided you can get your craft close enough to the carrier, and provided the enemy hasn't damaged the elevator.

COMMAND



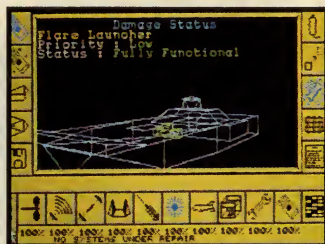
Part of the challenge of *Carrier Command* is the management of resources on board your ship. Count on the war being a long and costly one, and conserve your resources accordingly.

smooth flight characteristics produce a simulation worthy of a much more expensive game. The Walrus is fun to pilot, too, and is an essential part of any coordinated battle scheme.

While your pilots are out having a good time, things can get a little exciting back on the ship as well. Should you find yourself running into a hornet's nest of enemy crafts, you have a wide range of electronic weapons and countermeasures to call upon. Your main weapon is a huge, turret-mounted laser cannon which can lay waste to the defenses of a hostile island or protect the carrier from incoming attacks.

A word of caution, however: The laser cannon is an effective piece of equipment, and even on the normally lousy PC speaker, makes a rather satisfying sound when fired. Because of this, you may be tempted to use it more than you should, so remember to keep an eye on the temperature gauge. If your cannon overheats, it could put you out of commission in a hurry.

This brings us to an important point in the management of your ship—damage control. *Carrier Command* features an elaborate repair utility, complete with a wire-frame representation of the ship on which you can highlight the various systems and monitor the status of each. But you alone are re-



While having to repair your ship during an attack is not an ideal situation, at least the repair interface makes it easy to pinpoint and allocate your personnel most efficiently.

sponsible for determining repair priorities, and during a battle it could be a fatal mistake to overlook a critical system, such as your laser cannon or engines. This is one of the features that makes *Carrier Command* so challenging and so enjoyable. If you desire, you can exercise control of your operations down to the component level. You may end up with your hands—and a couple of other hands—full, but that's just part of the fun.

Navigation of the carrier is another area where you can be as involved, or as detached, as you wish. With the elaborate programmable navigation console, you can simply set a course, hit the autopilot, and sit back to wait for the next island. There's even a time warp control that compresses time. If, however, you fancy yourself something of a seaman, you may wish to take manual control of the ship. This route can either be monotonous or thrilling, depending on how concentrated the enemy forces are in a particular area. But, since your carrier is equipped with powerful radar, it's highly unlikely that anyone is going to slip up on you unnoticed (unless, of course, you're out joyriding in a Manta).

Given the multitude of options for playing *Carrier Command*, you would expect a fairly involved manual. The Mission Briefing and Mission Guide is

complete, but not ponderously so. It's easy to get the information you need without being overwhelmed. For all its complexity of play and number of levels, *Carrier Command* is extremely easy to get into. The control interface is icon-based, so you only have to point and click to access any system or sub-system. Even the Mantas and Walruses are controlled (and quite easily, I might add) by a mouse or a joystick.

The graphics are in EGA and are good, although not as finely detailed as in some simulations, so that scrolling and object movement can be as smooth as possible. Although the game can be played successfully on a fast XT, you really need a 286 machine to get the most out of the action.

Carrier Command has been unjustly overlooked for the last couple of years, but with MicroProse now distributing it, the second time around may be the charm. Don't be fooled by the unassuming box or the relatively low price. This is a game you'll be enjoying for a long time. It may not have the glitz of the latest simulation-to-end-all-simulations, but it does have one advantage that a lot of other games don't have—it's challenging and fun, without being frustrating or shallow.



When approaching a hostile island, you can expect immediate aircraft response. If you don't take out these first waves with your laser cannon, your Mantas and Walruses won't have a ship to return to.

GP

Hardware requirements: 512K minimum memory; VGA, EGA, CGA, Tandy 16-color, or Hercules graphics; joystick or mouse recommended.

PRINCE OF

GARY MEREDITH

Time is running out for the princess — literally. When she spurned the advances of the Grand Vizier, Jaffar, he kidnapped her and placed her in a room where she must watch the grains of sand that represent her life shift through a giant hourglass.

Jaffar has already stolen the throne of Persia from the princess' father, and now he means to complete his victory by possessing what the old sultan valued most — his daughter. She has only one hour

to decide whether to marry the Vizier ... or suffer a horrible death.

It seems like so long ago that you, a wandering

young adventurer, met the lovely princess. Then, as now, you knew in your heart that your lives would forever be intertwined. But you never suspected the lengths to which Jaffar would go to possess her — until Jaffar's men threw you into the endless dungeon below the sultan's palace.

Broderbund's *Prince of Persia* gives you the choice of rotting away in the dungeon while Jaffar terrorizes the princess, or doing something about it. As the action begins, you have discovered a way out of your cell, but nothing more. You're unarmed, with no idea of how to escape or what you may encounter around the next corner.

The dungeon is filled with all sorts of hidden traps and puzzles designed to frustrate even the most inspired hero. Seemingly solid floors disintegrate at your steps, gates open

With a 60-minute deadline, you can't afford just to stand around once you've escaped from your cell. That lower floor is ready to collapse, and you don't want to go with it.



and close by means of cleverly hidden switching panels, and razor-sharp jaws of metal await the unwary adventurer. Jaffar's own dungeon guards prowling the corridors, savoring an opportunity for swordfighting practice.

You must rely on your wits to save your princess — that, and the near-superhuman acrobatic skills which enable you to make jumps and climbs that would leave an ordinary human gasping for breath, or worse, lying in a puddle of blood and guts on the dank dungeon floor. But you needn't be unarmed for long; somewhere near your cell, the remains of some poor unfortunate contain a sword that's yours for the taking.

Of course, being a dashing and brave young adventurer means you quite naturally have a ready command of the blade. Jaffar's guards should pose little problem — at least those in the dungeons. The guards are more challenging the higher you go, but your prime consideration at the start is just getting out of that dungeon.

What sets *Prince of Persia* apart from the usual sword-and-sorcery action game is the fantastic animation. To everyone used to dealing with the choppy, unrealistic action of games prior to this, the character movements in *Prince of Persia* will be a revelation. There were more than a few "oohs" and "ahs" when we first loaded the game and viewed the stun-



For now the princess spurns the advances of Jaffar. But within the hour, she must give in to his desire or suffer a horrible death.



If only you had been a little bit lighter on your feet! Jaffar obviously spent a lot of money on this home security system.

PERSIA



There isn't any obvious landing place here, but if you expect to get much further, you'll have to make a leap of faith.

ning animation. Films of real actors performing various movements were used as a basis for the animation, and consequently there's a naturalness to the characters not seen before on PC screens.

When your hero climbs down from a ledge, his body swings quite realistically before dropping to the floor. Sword battles are a joy to watch, as fine movements such as the turned wrist in a parry are produced in lifelike detail. If this is a sample of what lies ahead for computer action games, then bring on the future.

If this were simply an action game, the graphics might even be enough to recommend it. Fortunately, there's a lot more to *Prince of Persia* than that. Throughout the more than 250 rooms you must explore in your search for the princess, you encounter more than enough puzzles to keep you



It appears that your swordfighting could use some improvement — and soon. Keep up your defensive parry, let the enemy come to you, and then counterthrust.

scratching your head for a long while. Just getting out of the dungeon may prove too tricky for some, as there are several places where straightforward logic doesn't apply. You have to learn to look at a problem sideways — much like in a Sierra or Origin game.

Since you won't find many simple solutions to the puzzles, your best strategy may be to play the game with a friend or two — different viewpoints may reveal solutions that a single player might miss. For example, on the second level of the dungeon, you must climb to the top of the ledge. If you go to the left, you reach a closed gate and a wide chasm that's just barely passable.

No matter where you look, you won't find a gate control. But if you take a "leap of faith" to the right when you reach the top of the ledge, you'll be rewarded with the solution. There's nothing to indicate that there's actually something on which to land, so you might ignore the possibility and spend several hours pulling out your hair while you search vainly for the illusive gate switch.

Since you'll probably find yourself dying a lot — especially early on — it's fortunate that there's a save feature, which is available from the third level on. When you reload

the game after dying, the action resumes at the beginning of whatever level you had reached when you died, but that's still better than going back to the very beginning.

You can avoid death entirely if you drink special energy potions scattered throughout the dungeon, but exercise some caution with the potions you find. Some potions contain deadly poisons, so don't chug down every bottle you pick up. The poison bottles have different markings than the bottles containing energy elixir or life



You must get up that wall quickly or the gate will start closing. This isn't the main pathway, but there is an extra life bullet for you just down the corridor.

elixir. After a couple of permanent hangovers, you should be able to tell the difference.

Prince of Persia is definitely a step forward in the realm of computer actions games. It's not the number of wickedly twisted puzzles that lifts it above its competition (though they certainly add to the total package) so much as it is the revolutionary, engrossing graphics. But don't get too absorbed in the graphics — remember, there's a princess waiting for you.

GP

Hardware requirements: 512K minimum memory (640K for VGA or MCGA graphics); VGA, MCGA, EGA, CGA, Tandy 16-color, or Hercules graphics; supports sound boards; 8 MHz AT or faster recommended.

RICK DAVIS' SWORLD

NEIL RANDALL

By the time you read this, the 1990 World Cup will be well under way. In all likelihood, it will attract the largest television audience of any sporting event in history.

To a nation accustomed to three sports — baseball, basketball, and football — dominating our television screens, this may come as something of a surprise. Soccer in the United States and Canada has never even approached the obsessive popularity it has earned in almost all other parts of the globe.



The opening screen lets you choose which team you'll play against. No slouches here: Each team is capable of winning the World Cup.

professional leagues have invariably folded — victims of low ratings and even lower attendance figures. Yet the World

Cup, staged every four years in either a North American, South American, or European country, out-draws all other sports by a wide margin.

Soccer's inability to sustain fan interest in North America stems from two major factors. First, its playing season conflicts with baseball. Second — and more important — it is a very low-scoring sport. Football scores are often on the order of 35-21; basketball scores frequently top 100 points for both teams; even baseball averages 6-8 runs per game. By contrast, soccer scores of 1-0 and even 0-0 are quite commonplace. That's why indoor soccer has done relatively well in the U.S.; the scores are higher, and some portion of the North American audience seems to equate scoring with excitement.

All of which brings us to Rick Davis' World Trophy Soc-



If your opponent scores a goal, you get the kickoff. Press the fire button to pass the ball to a teammate, then head down the field.



When you're dribbling with the ball, your opponent will try to tackle you by sliding into your feet from behind. Be prepared — he'll likely come up with the ball.

cer, a translation of the popular World Trophy Soccer coin-op arcade game. As you might expect, this game bears a direct resemblance to the arcade version. It has the same strengths and weaknesses, and is a good approximation of the original — overall a pretty good game, but not an exceptional one.

If you have a joystick, Rick Davis' World Trophy Soccer is quite enjoyable. Playing from the keyboard is awkward, however, and it takes considerably more getting used to. The problem is that key combinations rarely work; when you press the forward key, for instance, you must release it before pressing the forward-left key, and so on. This means that you'll end up losing the ball a

great deal, and you'll quickly get frustrated.

The game begins with you as the controller of one national team. You begin the first round by choosing which team to represent, France, Germany, Italy, or Spain. These games are very short, and goals are hard to come by, so often you end up with a scoreless draw or a 1-0 match. As you move through the various rounds, you play other teams from other nations, and the computer tracks your progress.

You control one player at a time. By pressing the fire button, you gain control over the player on your team who's closest to the ball, and an arrow appears above that player. By pressing in one of the eight



When the opposing player enters your goal crease, the scene shifts to your goalkeeper's view. Use the joystick to move from side to side, and press the fire button to jump for the ball.

TROPHY SOCCER

joystick directions, or by using the numeric keypad or other keyboard assignments, you move that player down the field. When you want to pass the ball or take a shot on net, you point the player in the direction you want the ball to go and press the fire button or its keyboard equivalent.

The ball travels until it goes out of bounds, reaches a player on your team or the opposing team, or rolls to a stop (and when a goal is scored, of course). Players on both teams attempt to gain control over a passed or shot ball, and, by pressing the fire button, you can take control over the player closest to the ball once more.

If an opponent has the ball, you can attempt a tackle. Unlike American football, where tackling means leaping on the ball-carrier and dragging him to the ground, tackling in soccer simply means taking the ball away. The only way to do so is to slide into the ball (or wait until the opponent coughs it up), which you can do by pressing the fire button when you're near your opponent. Your player will slide and stick out his leg, hopefully kicking the ball away from the opposing player.

When the ball goes out of bounds at the sides of the field, a throw-in occurs. If the ball



At the beginning of each half, the teams line up at the center field circle. Your goal is to get possession of the ball immediately.



When your forward takes the ball near the goal crease, consider passing rather than heading toward the goal. This often results in a better shot opportunity.

leaves the field and goes into the end zones, a goal kick or a corner kick takes place, depending on which team was responsible for the stoppage in play. Free kicks (i.e., fouls) also occur, albeit not very often.

Even though soccer is not essentially about scoring goals, doing so is still the only way to win. As a result, *Rick Davis Soccer* nicely emphasizes the importance of the shots on goal by changing from an overhead to a player's-eye view of the shooter and the goalkeeper. What becomes immediately apparent, though, is that even with this view goals are hard to score. Given soccer's reputation for low-scoring contests, this is an intentional (and correct) design.

Once inside the opposing team's penalty area, the game shifts to a close-up of the shooting situation. You can move from side to side or forward, and you can aim and shoot. The opposing goalie will jump up or across to make the save; if he fails, you've earned a valuable point. After a score, play resumes with a kickoff at center field.

A reverse close-up occurs when the opposing team bears down upon your net. Here you control the goalie by maneuvering the joystick and pressing the fire button to jump. It's anything but easy. Ideally, your goalie catches the ball and then kicks it away, but often there will be a rebound and you'll

have to make another save.

These close-ups are what make *Rick Davis's Soccer* unique. The problem with soccer games released to date is that they fail to distinguish between play in the middle of the field and play at the goal. Certainly this new game could be considerably more detailed in its approach, but the close-ups are good first steps. If only they were smoother, they would be extremely appealing.

But like all computer soccer games released to date, *Rick Davis's Soccer* represents only a partial simulation of this complex sport. Nowhere to be seen are the long, involved build-ups, with teams making pass after pass and trying various maneuvers in an attempt to break through a seemingly impenetrable defense. There is simply not enough control over any aspect of the game.

If you like the arcade version of this game, you'll like this version as well. If you're a real soccer fan, however, you'll probably be disappointed. Somewhere, sometime, someone will release a superb soccer simulation. So far, though, no one's even come close. *Rick Davis World Trophy Soccer* is fun, especially with two players, but it's not really soccer.



When your forward nears the goal, the overhead view is replaced by this view of the net and the ball. Aim well, but shoot quickly.

Hardware requirements: 512K minimum memory; VGA, EGA, CGA, or Tandy 16-color graphics; joystick optional.

GP

SECOND FRONT

WILLIAM R. TROTTER

In terms of scope, ferocity, and impact on the post-war world, no campaign of World War II comes close to the apocalyptic death-struggle between Hitler's *Wehrmacht* and Stalin's Red Army. Winston Churchill was not engaging in idle hyperbole when he spoke of the Red Army "tearing the guts out of the German war machine." It was a fight to the death between the biggest army on Earth and the most mechanized; between totalitarian regimes each of whose ideolo-



The moment of truth at Leningrad. Will you assault the city (and risk a bloodbath of casualties) or surround it as Hitler did?

gies were, to a large extent, predicated on the extermination of the other; between generals who believed that superior training and technology could offset sheer numbers, and generals who did not flinch before casualty figures that would have toppled any Western government overnight.

It was a war whose 1200-mile front stretched from the sub-arctic fells of Lapland to the majestic peaks of the Caucasus. The ebb and flow of its campaigns was like a cycle of tidal waves, devouring hundreds of miles and reducing entire cities to smoldering heaps of rubble. In all, some 350 divisions fought on both sides with a savagery that produced more battlefield deaths in any given week than the United States suffered during the entire European campaign. Before it was over, the war on the Eastern Front would claim the lives of 20 to 30 million people.

The campaign exerts a basilisk-like grip on the imagi-

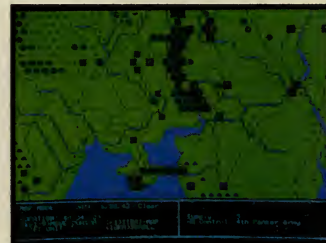
nations of war-gamers not just because of its drama, but also because a convincing case can be made that, if it had not been for Hitler's increasingly deranged interference at a number of critical moments, the German generals almost certainly could have won — with staggering consequences for future history.

Good tactical-level Eastern Front simulations abound in the PC format — both *Fire Brigade* and *Panzer Battles*, for example — but in SSI's new *Second Front*, veteran war-game designer Gary Grigsby has done something never done before in any format, board or computer: He has created a simulation that conveys both the epic sweep and the ask-no-quarter bloodiness of the campaign on both the strategic and tactical levels, and he's wrapped the whole awesome thing into a game-system that is positively hypnotic in its playability.

Second Front's map is based on an invisible hex-grid system (still, after all these years, the most satisfying system for war-gaming), and depicts everything from Berlin in the east and Lake Ladoga in the north to Sevastopol and Baku in the south. Each hex represents 20 miles of terrain. An exception-



A quick glance at the AFV replacement pool shows enough Pz-IVg's to upgrade two panzer divisions. But which two, and where?



June 28, 1942: The start of the Stalingrad scenario as displayed on the strategic map.

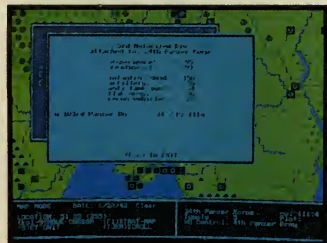
ally logical system of invisible zones represents command control and supply (and a toggle key superimposes on the map all hexes that are considered "in supply" by the computer — an enormous help to the field marshal who specializes in double envelopments).

Most game players will probably start out trying to see if they can do better than Hitler. *Second Front* goes deep in this regard, permitting you to put Germany on a "total war" footing from the beginning by assigning production priorities that insure a flow of new, improved hardware to the front, by allowing you to upgrade the equipment of mechanized and aerial units more expeditiously and rationally than Hitler's system provided for, and by allowing you to appoint commanders according to their abilities, not their sycophancy. The better the corps' commander, the less likely it is that a unit will be "shattered" by a severe enemy blow.

There are two "campaign" scenarios: The original Operation Barbarossa (starting in June, 1941), and the 1942 campaign that culminated — disastrously — in the debacle of Stalingrad. Battle scenarios include the struggle for Moscow (winter, 1941) and that for Stalingrad.

Each game-turn represents one week of real time, so if you begin one of the campaign scenarios, don't expect to finish it the same day (or even the same week).

The unitsymbols represent corps, but a couple of simple keystrokes let you go as deep into the organizational levels as you want, to examine the experience, readiness, and equipment of individual battalions. A similarly "layered" approach has been used to show combat results: You can get a strategic read-out, which tells simply the net result in win-lose-or-draw fashion, or you can access reports down to the level of how many tanks,



It's easy to access detailed information on any unit. This division looks ready to go and can be expected to perform well in battle.

planes and gun batteries were involved and lost. The games speed by much faster at the former level, but few gamers will be able to resist watching a crucial battle develop as each division reports its losses or gains.

As supreme commander, you can also set replacement levels for each headquarters (and if you're playing on the German side, you'd do well to crank those up to 100 percent) and transfer divisions from the Italian or Western fronts. Don't overdo the latter, however. We

tried gutting the reserves in France and Italy and massing about ten new corps for an all-or-nothing offensive on the Stalingrad front and succeeded in taking Stalingrad all right, only to have the computer inform us that the Allies had just staged a landing in France about two years ahead of D-Day.

There are many, many options with which you can tinker to give your chosen side an extra edge when and where it's needed, but the program *won't* allow you to distort history by giving Hitler jet aircraft two years early or Tiger tanks in 1941. You *can* do anything that was feasible according to the resources and technology available at the time, but you can't indulge in science fiction.

For instance: Hitler insisted that the Messerschmitt Bf-109 remain in production long after it should have been replaced by the better-armed and more durable Focke-Wolfe 190, due solely to the political influence of Willy Messerschmitt. If you elect to run the German war effort, one of your first strategic decisions should be to take your Messerschmitt plants off-line and retool them for Fw-190s, then start upgrading your fighter squadrons as soon as you can (and don't forget the Romanian and Finnish squadrons, who begin the war with obsolescent Fokkers and G-50s). Do this, and tactical air supremacy is virtually assured for the first two years.

Hitting the Alt-P key displays the current Replacement Pool, showing a tally of all new and repaired tanks and planes available during a given turn. Make a habit of upgrading the firepower and armor of even the small tank-hunter and self-



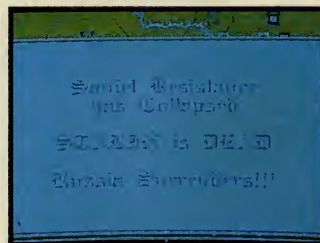
By placing the cursor over an HQ unit, you can mount powerful air attacks against tactical or strategic targets.

propelled gun battalions attached to your infantry divisions. For the German commander, such attention to detail can spell the difference between holding on through the winter and being shattered by the repeated sledgehammer blows of the Red Army.

The graphics in *Second Front* are as handsome as the game-system is elegant. When the autumn rains come, the map turns a soggy brown; when winter arrives, all lakes and rivers turn white, and white shading appears on the land. And when the dreaded blizzard of '41 strikes, the entire front suddenly and dramatically appears to be covered with ice crystals.

Formidable in its depth, beautiful in its presentation, utterly spellbinding as a game-playing experience, *Second Front* is one of the best war games ever published for home computers. And it is, without question, the big Eastern Front game a lot of people have been waiting for.

GP



November 8, 1942: Operation Rhinegold brings a dramatic turn of events — not to mention a drastic rearrangement of history....

Hardware requirements:
640K minimum memory for EGA graphics; 512K for CGA graphics.

SKI OR DIE

ARLAN LEVITAN

With the hot days of summer near an end, Rollin' Rodney, the erstwhile proprietor of *Skate or Die's* Skate Shop, has traded his inventory of skateboards for skis, and is high-tailing it up to the mountains for the winter.

Electronic Art's *Ski or Die* has the same underlying structure as its predecessor, snowballing a handful of competitive events into an entertaining blizzard of fun for one to six players. After registering at Rodney's ski shop and trading



A foolhardy brat gets his just deserts in the Snowball Blast.

a few insults with the proprietor, it's just a short schuss over to the Village Square. There you're afforded the opportunity to practice any of *Ski or Die's* five events to your heart's desire before electing to participate in an all-event competition for maximum points.

The Snowboard Half-Pipe places you on a five-foot snowboard, hurtling down an icy trench. You rack up points by executing jumps, flips, and other gnarly tricks of varying difficulty while dodging the rocks and buzzsaw-toting bunnies in your path. Points awarded for stunts vary according to variety, speed, and position in the trench. It may be tempting to blitz punk-haired penguins in the center of the half-pipe for points, but the best scores are to be had by grandstanding on the lip of the pipe. Be sure not to hold a stunt pose too long, or you'll find yourself dancing with a Douglas fir or decked by Frosty the Snowman.

Arcade fans will feel right at home in the Snowball Blast, an event which can be more or less described as a non-violent take-off on *Operation Wolf*. Waves of adolescents armed with well-packed powder methodically creep up on your strategically placed (but vulnerable) ice bunker. All that separates the capricious kids from your rucksack full of junk food is the accuracy of your aim as you throw your limited supply of snowballs.

Complicating matters is the fact that the brats come at you from four different directions, which requires you regularly pivot and pitch to keep from being buried in slush. Try to pick the kids off while they're far away — it'll result in higher scores. Ignore the other "extra credit" targets. The Eskimos, Abominable SnowThings, and Bermuda shorts-clad polar bears can't blast you, and hitting a snowball-slinging youngster is almost always worth more points. Don't pass up



High speed down the jump slope is the key to recovering from mid-air stunts in time to land safely — and earn a high score in the Acro-Aerial competition.

extra stashes of ammo or the occasional shovel; they can be critical to your survival. The shovels can be particularly helpful, as they rid you of a portion of your accumulated snow coat.

Acro Aerials gives you the opportunity to wow a crowd of onlookers and a panel of jaded judges with mid-air acrobatic feats of derring-do. The event begins at the top of a ski-jump so you can gain altitude. Picking up maximum speed down the jump slope is critical if you're to achieve sufficient height to execute multiple flips and tucks in a single jump. Move too slowly and you're likely to end up imitating Eddie "The Eagle" Edwards.



Don't worry about the shingles! Land on the chalet's roof and cut to the right in the Downhill Blitz. Be sure to jump again as you leave the roof.



Don't be tempted to swoop down on punk penguins in the Snowboard Half-Pipe. Stick to executing stunts on either lip of the trench.

You'll know that you've gained enough velocity when you can catch a glimpse of the *USS Enterprise* at the apex of your airborne trajectory. Once you've got the basic moves down, concentrate on the more difficult (and valuable) stunts, paying special attention to avoid jerking the joystick when making transitions between feats. Smooth movements result in higher scores from the judges.

For the Innertube Thrash, you and an opponent hop into oversized inflatable rubber donuts and bounce helter-skelter down a slick glacier face. While impeding the other guy's progress may be emotionally satisfying, give him a wide berth when possible and concentrate on getting to the bottom of the course first to earn a cool one thousand points.

The more hot air in your tube, the faster you'll go, and when running over patches and bumps in your path turn up the pressure. Bouncing your opponent into mouse and bear traps deflate more than his ego, or, for the more direct approach, pick up a pocket knife and be prepared leave it as a present in someone else's sidewall.

Now that you're all rested

up from lying on your back, hop in a chopper and get dropped (or is that dumped?) at the summit of Mount Rodney for the Downhill Blitz, a no-holds barred freestyle slalom down the face of the mountain. Take it slow for your first practice rounds and study the layout of the course carefully. Finishing the event without wiping out is worth another thousand points, so learn to stay upright before attempting any stunts while jumping off ridges or onto chalet roofs. Tricks during jumps from cliff edges

are a bit hairy, but they're worth the extra points if you can master them.

Ski or Die is, in some respects, a "formula" game. It's basic format is markedly similar to other multi-event diversions released by Electronic Arts and its competitors. However, it has a number of niceties that help make it stand out from the crowd. The program's EGA and Tandy graphics are extremely well rendered, and the designers' sense of humor often adds a pleasing touch of whimsy.

Both the joystick and keyboard interface are logical and responsive, and none of the events require razor-quick reflexes for satisfying success. Support for the AdLib and Roland MT-32 sound options is outstanding, making use of advanced sound capabilities in all of the events, as well as for the game's catchy theme.

If you're tired of the same old hot summer games and need to cool off for a week or two, head for the slopes with Rodney and chill out with *Ski or Die*.

GP



Your primary goal in the Innertube Thrash is getting to the bottom first. A brief detour to pick up a scout knife is worth it only if it doesn't take you too far out of your way.

Hardware requirements:
384K minimum memory;
EGA, CGA, or Tandy 16-color
graphics; joystick optional;
supports sound boards.

WOLFPACK

WILLIAM R. TROTTER

"The only thing that ever really frightened me during the war," said Winston Churchill in his memoirs, "was the U-boat peril." You can understand his concern, for in 1942, at the height of the Germans' unrestricted submarine campaign, Allied merchant ships were being sunk faster than they were being built and England was on the verge of starvation.

Close-run battles make for the best computer simulations, and Broderbund's new *WolfPack* does a good job of capturing the drama of this epic struggle. There are a number of

good submarine simulations on the market, of course, but most of the newer ones are high-tech variations on the *Red October* theme, and

the World War II simulations — most notably MicroProse's *Silent Service* — focus on American missions in the Pacific Theater. *WolfPack* is the first mass-market game to simulate subs-versus-convoy actions in the Battle of the Atlantic.

It does so with remarkable fidelity to its subject and unprecedented role-playing virtuosity, allowing you to control either side. As the wolfpack's commander, you can stalk convoys of various kinds in several different geographical regions and periods of the war. Later, you can replay the same types of scenarios in command of the surface fleet.

You can load a dozen out-of-the-box scenarios or — once you're familiar with the game — you can use the construction program to generate dozens of



The construction set included with the game lets you design custom battles in five different parts of the Atlantic.

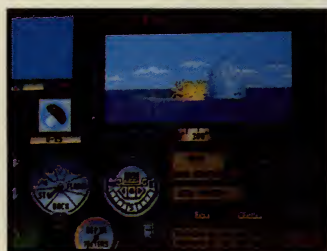
new missions. Among the more interesting options are the "duel" scenarios, in which you command one side and a friend takes the other. You can set your own time limit for duels and the computer will generate a proper number of sequential turns. These can be pretty intense contests, often reminiscent of the classic submarine warfare film *The Enemy Below*.

If you're the wolfpack commander, you should first review (via the strategic chart) the existing patrol paths of your pig-boats. You can jump in and modify them at any point, and after a bit of practice, you'll find yourself "orchestrating" your boats' actions in classic wolfpack style. Ideally, you should try to figure out the

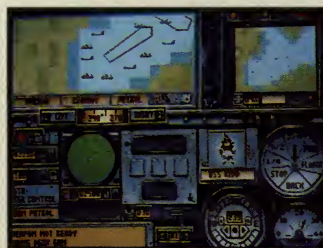
heading of your targets, then group your subs so they will lie submerged across the convoy's path.

Take advantage of the fact that a surfaced U-boat could move two or three times faster than the average convoy (the overall progress of which was limited to the speed of the slowest vessel), but only if it's dark or you're safely out of radar range.

As surface commander, your job is to protect the convoy — not go chasing all over the ocean for U-boat kills. You should plot a course that lets you reach your destination on time and with minimum losses. You decide the route, the escorts' formation, and the amount of zig-zagging.



The action-packed graphics in *WolfPack* are exceptionally realistic.



You can also command the convoy's escort against the computer or a human opponent. Battles in *WolfPack* tend to become intensely personal duels.



You can handle emergency damage control at sea, but for supplies you must either return to base or rendezvous with a "milch cow" sub.



When a destroyer turns bow-on to your periscope, fire a down-the-throat spread of torpedoes, and then crash dive.

For sub combat, you'll have depth charges, hedgehogs (after 1942), and cannons. You must also master specialized tactics, such as "sprint and drift" — cutting engine power in order to listen on your hydrophones.

The pre-set scenarios cover just about every type of action characteristic of the North Atlantic campaign. There are two easy practice battles and ten much tougher actions set in the Bay of Biscay, the Caribbean, the choke-point of the Straits of Gibraltar, and the mid-ocean vastness of the Atlantic. Some missions are set in the earliest months of the war (called "the happy time" by U-boat crews), when Allied escorts were few and targets were ripe. Others — perhaps the most interest-



Nighttime scenes are beautifully rendered; the use of color throughout this game is especially subtle and effective.

ing of all — are turning-point battles from the mid-1943 period, when the U-boats' expertise was evenly balanced against the Allies' technology and growing numbers.

While Broderbund's EGA graphics are certainly good enough to permit full enjoyment of the game, the program takes a quantum leap in realism when viewed in the VGA mode. The textures of water and steel become almost tactile; torpedo explosions look fearsomely authentic and wounded ships slide into the depths wreathed in coiling smoke and licking tongues of fire.

A good soundboard also adds considerable extra realism: the eerie *ping* of sonar, the *whoosh* of torpedoes leaving

their tubes, the splash and subsequent *crump* of depth charges ... these and numerous other sound effects generate a very convincing sense of atmosphere.

Broderbund's manual is well illustrated and thorough, but the prose is curiously tentative when it should be crisp and decisive. It's as though the writer(s) were not really comfortable with the subject matter. And there is a whopping historical error on page 75. The silhouette of an Allied escort ship shown there is identified as a "Fletcher-type destroyer" whose secondary battery was comprised of "four 1.1-inch guns."

But the vessel shown is actually a Buckley-class destroyer escort and looks nothing like the larger Fletcher-class DDs. And after the start of 1942, not a single U.S. warship was configured for the obsolete and ineffective 1.1-inch guns (nicknamed "Chicago Pianos" in a now-obscure reference to the gangster films of the 1930s). The 1.1-inch guns were replaced by the more powerful Bofors 40-mm. and Oerlikon 20-mm. weapons, updated versions of which remain in service to this day.

Fortunately, the game designers did their homework more effectively than the manual-writers. *WolfPack* merits an Iron Cross, first class, for its realism and intensity.



If you're forced to the surface, you can still fight with your deck gun ... but probably not for long.



After each engagement, your performance is critiqued — none too gently — by the computer.

GP

Hardware requirements: 512K minimum memory; VGA, EGA, CGA, Tandy 16-color, or Hercules graphics; joystick and mouse optional; supports sound boards.

LES MANLEY: HERO FOR THE 90S?

Accolade has taken a big plunge into what it calls animated adventures. Heading their list is *Les Manley in: Search for the King*. In this game, you play a meek nerd who works for the lowest-rated TV station in town. He sets out to win \$1 million in a contest to be the first to find, then identify the King—the world's most popular and elusive entertainer.

Though the predicaments which confront Les are rather ordinary, he's just dweeb enough to find a bizarre, screw-ball solution for each crisis.

A more otherworldly tack is taken in *Altered Destiny*, Accolade's new sci-fi role-playing game designed by well-known science fiction author Michael Berlyn.

A well-meaning yuppie management type sits down with his girlfriend to watch a film festival on TV and gets sucked through the tube into a fantastic alternate world inhabited by strange life forms and

Altered Destiny



Les Manley in: Search for the King

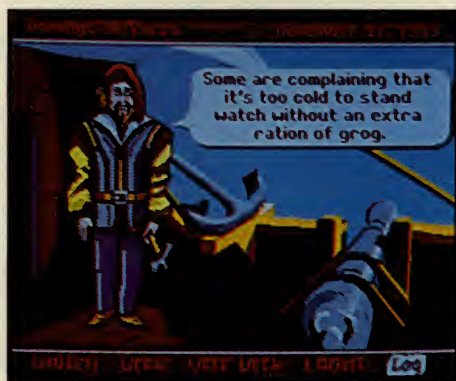


outlandish characters. *Altered Destiny* promises to be visually striking and is filled with graphics-based puzzles and brain-teasers.

On a more down-to-earth level, Accolade is planning a September release for a com-

puterized version of the classic board game *Stratego*. This version features five levels of difficulty and a rich array of customized battlefields.

SAIL WITH MAGELLAN IN GALLEONS OF GLORY



Galleons of Glory

You may think you know what Magellan's goal was when he undertook the first circumnavigation of the globe, but in this new two-fisted simulation from Broderbund (based in part upon records kept by members of Magellan's crew), you'll find a new dimension of intrigue and challenge.

Galleons of Glory puts you in the explorer's boots with a crew of mutinous sea dogs and a secret agenda from the king. Maybe you can handle the crew,

but what about the storms, the outbreaks of scurvy, and the Portuguese spies?

Sure to be popular with fans of the best-selling board game is Broderbund's computer version of *Pictionary*, in which players guess at words sketched by the computer or by other players. An easy-to-use paint program makes it fast and simple to create sketches with your computer.

GRAB YOUR SUNSCREEN FOR MORE CALI- FORNIA GAMES

The sun never sets on *California Games*. A sequel to the popular Epyx game is scheduled to ship in September.

A fifth event has been added to *California Games II* for even more sun-bronzed enjoyment. You can now choose from snowboarding, jet ski racing, bodyboarding, skateboarding, and hang gliding.

In August, Epyx will release a boxed set of its *Games* series. Included in the package will be *Winter Games*, *Summer Games II*, *World Games*, and *California Games*.

"X" MARKS THE SPOT

Lucasfilm's new graphic adventure, *The Secret of Monkey Island*, takes a light-hearted and salty romp through the swashbuckling days of the Spanish Main. Arrive with the hapless hero at the smarmy port of Melee, equipped with high hopes, insatiable curiosity, blessed naivete ... and no money.

At the heart of this game are a number of hugely entertaining puzzles. The player must unravel hidden meanings from conversations loaded with double-entendres and lethal one-liners. The game play and complexity are said to be on about the same level as *Maniac Man-*

sion, but the graphics should be much more sophisticated. This is the first Lucasfilm game to make use of proportional scale in character animation, a process which adds subtle (yet significant) realism to the look of the game.



The Secret of Monkey Island

THE SPIRIT OF EXCALIBUR LIVES!

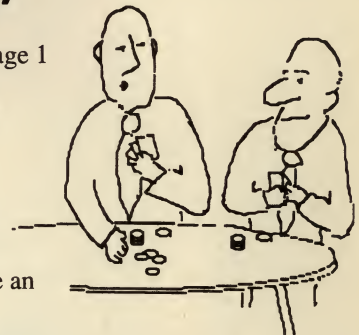
The first in a synergistic game series (games in which characters created in one game can be used interchangeably in others) from Virgin Mastertronic, *Spirit of Excalibur* combines all the traditional sweep and depth of the best fantasy role-playing games with optional arcade-style control over individual knights and wizards — all within a framework of grand strategy.

Scheduled for a fourth-quarter release is *Quasar*, an epic-scale game of galactic exploration, resource management, and conquest. This game even lets you "terraform" entire planets to suit your strategic needs. Your ultimate objective: to take by force an enemy planet on the far side of the galaxy.

"POKER SHOWDOWN, A VIDEOGAME OF HIGH TENSION AND REALISM"

—The Wall Street Journal, March 15, 1990, page 1

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ATTENTION: POPULOUS-ADDICTS! ARE YOU READY FOR POWERMONGER?

In response to the overwhelmingly favorable reception given to *Populous*, Electronic Arts is releasing an even more richly detailed sequel entitled *Powermonger*. When the game begins, you arrive on an uncharted world (there are hundreds contained in the program) at the head of your tribe.

The situation is essentially peaceful at first, but powerful enemies are massing just over the horizon. You must decide whether to negotiate, wage war, or ally yourself with the various leaders of this new land, all of whom have their own personalities and character traits.

These are dynamic worlds, where the inhabitants react on their own, go about their daily business, and intelligently interact with you and the rival forces trying to control their lands.



Powermonger

If ruling an entire world doesn't appeal to you, how about attacking a country instead?

Show Soviet President Gorbachev how grateful you are for all he's done to break down the Iron Curtain by enlisting in the Red Air Force and blowing the *kvass* out of assorted reactionaries, terrorists,

and Tzarist fanatics.

As an elite Soviet pilot maneuvering the tough and versatile SU-25 "Frogfoot," you'll fly secret missions for Gorby himself. Electronic Arts has based *Gorbachev's Ace* on the same engine as *LHX Attack Chopper*, but has improved the graphics and added a number of new features.

HARPOON FANS REJOICE! THE SCENARIO EDITOR IS HERE

A consumer version of the same in-house program used to design the game *Harpoon* has just been released by **Three-Sixty Software**. The *Harpoon Scenario Editor* uses the same graphic interface as the *Harpoon* master program, and gives the user complete control over every variable in every scenario: geographical location of units, weapons, air assets, and so on.

Users can be up and running in a matter of minutes and

can check their custom battlesets against a built-in program analyzer, which makes sure all the ingredients for a playable scenario are present.

Three-Sixty is also releasing *Sands of Time*, a World War II North Africa tank simulation. A popular wargame for the Macintosh, *Sands of Time* lets you choose from among six different historic desert battles, from Tobruk to Kasserin Pass.

A TOM CLANCY BLOCKBUSTER FROM CAPSTONE

Designed in close cooperation with author Tom Clancy, **Capstone Entertainment's** *The Cardinal of the Kremlin* immerses the game player in a riveting high-tech saga of spies and scientists. While you strive to make a system of anti-missile lasers operational, you're beset by espionage and misinformation, by kidnappers and unexpected political upheavals. You must learn to run a spy network, monitor peace negotiations, and deal with third-world terrorists in this simulated thriller.

THE CASE FOR SPACE ACE

If you were impressed by the graphics of *Dragon's Lair*, get in line now for *Space Ace*. ReadySoft promises that this new game surpasses the graphics, animation, and sound of the earlier adventure.

You play Ace, space hero, who must rescue his girlfriend from the clutches of Borf. The kidnapping is just one step in the evil commander's plan to turn everyone on Earth back into babies with a strange new weapon — the Infanto Ray.

Only the bravest space warriors will be able to save the girl, the planet, and the adults of today.

"WORLD OF ULTIMA" UNVEILED

To celebrate the tenth anniversary of its *Ultima* series, Origin has released the first of a new series of role-playing adventures set on planets beyond Britannia.

The Savage Empire is set in the tropical world of Eodon, where time stands still and the jungle landscape is filled with mysterious lost cities, sinister monuments, stone-age tribes, dinosaurs, and, of course, a scantily-clad (but ever-so-competent) jungle princess.

An act of homage to the "lost worlds" stories of Rider Haggard and Conan Doyle, *Savage Empire* makes use of the same world-simulation system seen in the recent *Ultima VI* game.



The Savage Empire

ROGER WILCO: NOT OVER, NOT OUT



Space Quest IV: Roger Wilco and the Time Rippers

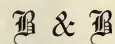
Two Guys from Andromeda have done it again (with a little help from Sierra). Roger Wilco is back in his fourth adventure, *Space Quest IV: Roger Wilco and the Time Rippers*.

Roger is in hot water as usual, but this time you can watch his perils and triumphs in VGA graphics. It's the first time a Sierra game has been released with the 256-color capability. Other Sierra ad-

ventures to look forward to include *Fire Hawk: The Second Encounter*, a follow-up to the space shoot-em-up; *Hero's Quest II: Trial by Fire*, which takes the hero you built in the first adventure on a magic carpet ride to Arabia; *Keeping Up with Jones*, an interactive game of life in the rat race; and *Oil's Well*, in which you try to keep your status as oil baron despite sabotage attempts by your rivals.

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FACES: A NEW COUNTENANCE FOR TETRIS



Faces (Tris III)

In a marketing double-whammy, **Spectrum HoloByte** recently released two high-profile games, each about as different from the other as you could imagine.

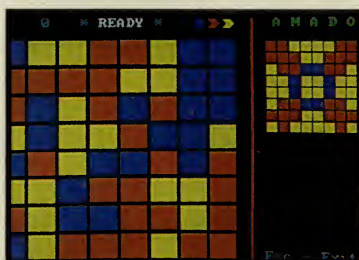
Faces (Tris III) is the latest brain-teasing challenge from Alexey Pajitnov, the whimsical Soviet who addicted millions with the earlier "tris" games, *Tetris* and *Welltris*. In this new game, the object is to stack falling face segments so that they end up resembling the complete faces of the famous and not-so-famous. As in *Tetris*, you move the chins, lips, noses, eyes, and crowns to the left or right as they fall. The mistakes can be hilarious — Sitting Bull's nose looks pretty strange sitting on Abra-

ham Lincoln's chin.

Riding the publicity wave for the summer movie of the same name (starring Brad Johnson, Willem Dafoe, and Danny Glover) comes the PC version of *Flight of the Intruder*. This simulator puts you in the cockpit of a Navy A-6 intruder (or an F-4 Phantom), and lets you fly multiple missions over North Vietnam in 1972.

One interesting wrinkle: You can choose the role of mission commander and take charge of the whole show — target selection, ordinance stores, navigational waypoints, and so on — then jump from cockpit to cockpit in order to observe the whole attack.

AMADO



Amado

If you thrive on brain-teasing puzzles, take a look at *Amado*, a game of colors and spatial relationships designed and marketed by Yong Choi of Toledo, Ohio.

The starting point for this game is one of more than a hundred computer generated and colored patterns. After studying how the figure is supposed to look, the player must take a scrambled version and reassemble it to match the original.

Each box within a pattern is colored red, blue, or yellow. By moving a box-shaped cursor between two differently

colored boxes, you change the color of the destination box into the third color. If you move between two boxes of the same color, no change occurs.

The concept behind *Amado* is fairly elementary, but arranging the correct permutations of color within the time limit proves to be quite challenging. The price is right: \$15 plus \$2 shipping and handling gets you a registered copy and the instructions. If you're the kind of game player who enjoyed Rubick's Cube, check out *Amado* by writing to: Yong Choi; P.O. Box 17896; Toledo, Ohio, 43617.

RACE THROUGH DAYS OF THUNDER

om Cruise doesn't come with the box, but all the other excitement of Paramount's movie can be found in *Days of Thunder* from **Mindscape**. The action-packed stock car simulation follows a race car driver from the bottom rung as he climbs the ladder of success on the NASCAR circuit.

Also from Mindscape is Chris Crawford's latest game. In *Global Dilemma — Guns or Butter*, you start as a ruler of a small country with an ambitious eye set on conquering the whole continent. You must collect weapons, organize troops, and allocate resources between military production (guns) and domestic goods (butter). Once your supplies have been built, you must decide when and where to deploy troops, and whether or not to form alliances with other countries.

WILL JAKE MASTERS BE THE NEW JAMES BOND?

Dynamix is betting that its new hero, Jake Masters, is going to take PCs by storm. In his first adventure, *Heart of China*, the 1930s hero travels to revolutionary China to battle diabolic enemies and woo gorgeous women. Striking VGA graphics combine with complex character interaction and puzzle-solving to form a high-action, high-velocity, high-tension adventure.

The same great graphics can be found in other Dynamix

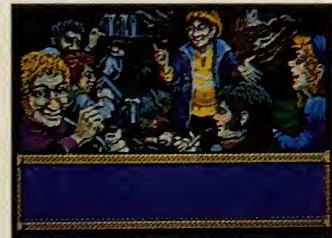


Heart of China

titles, including *Red Baron*, a World War I flight simulator; *Rise of the Dragon*, a futuristic private-eye adventure; and *Stellar 7*, an updated version of the classic arcade game.

FRODO'S ADVENTURES CONTINUE

The saga of Middle Earth proceeds with Interplay's *Lord of the Rings*. The familiar and much-loved tale by J.R.R. Tolkien again follows the adventures of Frodo. This time the Hobbit is one of several different races in Middle Earth competing for ownership of the all-powerful rings. If the rings fall into the hands of evil, Middle Earth will be destroyed.



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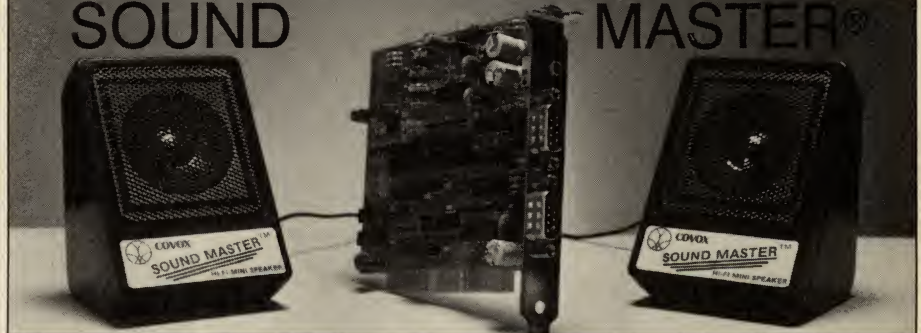
SPORTS GAMES ADDED TO MVP LINE

Data East is keeping the ball rolling with its line of MVP sports simulations. Added to the list of titles is *Bo Does Baseball*, one of the first computer sports simulations to use real time, on-line sports statistics. Using a modem to access data from the USA Today Sports Center, players can put Bo Jackson in actual game situations using current professional league statistics.

The Dream Team: 3 on 3 Challenge features all-pro basketball players Patrick Ewing, Dominique Wilkins, and James Worthy in a fast-paced, challenging game. *The Dream Team* also uses on-line sports statistics.

Data East is also offering an updated version of *ABC Monday Night Football*. The new simulation has an enhanced user interface, improved statistics, better sound, and VGA color graphics.

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A SUMMER FOR WEIRD DREAMS

With a plot right out of a psychological thriller, *Weird Dreams*, a new release from MicroProse, might be one of the more interesting games of the summer.

In it, you travel inside the mind of a hospital patient undergoing surgery. While the patient is under the anesthetic, you'll encounter man-eating rose bushes, giant insects, a demonic soccer ball (great for U.S. fans still upset over the World Cup) — even a person trapped inside a cotton candy machine. Your reactions to the things you see directly affect the health of the hapless patient. MicroProse describes *Weird Dreams* as a computerized ink blot test.

MicroProse takes you from the operating room to the pool hall with its upcoming *Sharkey's 3-D Pool*, a billiards simulation that features eight-ball, nine-ball, rotation, or 14.1 continuous tournaments. Or if flying is more your speed, try *Knights of the Sky*, a World War I aerial combat game in which you can play a U.S., British, or French flying ace bent on shooting

down as many Germans as possible.

Under its MicroPlay label, MicroProse plans a summer release for the long-awaited *Universal Military Simulator II*. This second wargame construction kit allows players to simulate historic battles exactly, modify them, or invent fantasy battles. *UMS II* even includes a Planet Editor so you can invent whole worlds as well as entire combats.

And new releases are also scheduled for another MicroProse division, Paragon. One of its new games should be familiar to board game fans. *MegaTraveller 1: The Zhodani Conspiracy* is based on the role-

playing series by the Game Designers' Workshop. Players build a five-character team capable of handling spaceships and space creatures in the realm of the Imperium.

Space 1889 is another science-fiction adventure from Paragon. Using the concept of space travel as it was imagined by Thomas Edison, Jules Verne, and H.G. Wells, you play a Brit who gets the chance to compete with a computer-generated party to excavate for King Tut's tomb. But Egypt is only the first stop in an adventure that will eventually take you to the moon, Mars, and Venus.

Finally, Paragon is releasing *The Punisher* as a follow-up to its *Dr. Doom's Revenge* and *X-Men* comic book adventures. Based on the Marvel Comics character, the Punisher is a vigilante who won't rest until he has revenge on the men who killed his family. No superhero, the Punisher uses extraordinary weaponry to fight crime. And there's a lot of crime-fighting to be done in New York City — players can choose from more than 100 missions.



MegaTraveller 1: The Zhodani Conspiracy



The Punisher

ROLE PLAYERS CAN FREE DRAGON CONTI- NENT

New World Computing, the company that produces the *Might & Magic* games, has another alliterative adventure for its fans. In *Tunnels & Trolls*, your adventurers are trying to locate the great wizard Khazan, who was imprisoned by Leotra'hh, the Dark Empress. Only by freeing the wizard can you save the Dragon Continent from Leotra'hh's clutches.

Like traditional role-playing games, *Tunnels & Trolls* boasts dozens of magic spells and monsters. Your character can be either a warrior, wizard, or rogue. The game system is extremely easy to learn, and the text more detailed and descriptive than almost any other game in the genre.

WALK LIKE AN EGYPTIAN

Find out what ancient Egypt was really like with the cultural simulation *Day of the Pharaoh* from Taito. As a lowly peasant, your goal is to become ruler of Egypt by establishing trade and building ships. You must balance matters of war with those of religion, and decide whether to concentrate on building pyramids or a harem.

One of the most popular arcade games, *Rastan*, is also coming to PCs from Taito. The game is set in the ancient land of Lograth, where young Rastan must destroy the sinister creatures who prey on his people. His quest takes him to four castles ruled by the Castle King's Lords of Destruction.

Other Taito titles include *Castle Master*, a graphic adventure; *Puzznic*, a puzzle game in which you match puzzle pieces with geometric shapes; and *Rambo III*, based on the 1988 movie, in which you must free a U.S. colonel from a fortress in Afghanistan.



Day of the Pharaoh

93



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WONDERFUL WORLD OF DISNEY REACHES PCS



The familiar faces of Mickey Mouse and Donald Duck may be vying with Dick Tracy's mug for time on your personal computer. **Disney Software** has ten new games designed for every member of

your family.

Top on the list is *Dick Tracy*, based on this summer's movie. As the square-jawed law enforcer, you must stop the crime war led by "Big Boy" Caprice and his gang. You'll question

suspects — including Breathless Mahoney, The Brow, and Pruneface — collect clues, and then arrest the criminals you corner.

Another summer movie has turned into a Disney game. *Arachnophobia* pits one or two players against a lethal horde of spiders. The U.S. Department of Agriculture has hired you (as the boss of Bugs-Be-Gone) to destroy the queen spiders and their offspring before they invade the country. Once you've cleared out the U.S., you're hired by the United Nation to perform the same duty deep in the Amazon. This time you're in the spiders' backyard.

Disney games featuring animated characters are led by *Ducktales: The Quest for Gold*. Scrooge McDuck is competing for the title "Duck of the Year." He and his main rival, Flintheart Glomgold, must race through the Beri Beri Basin, the

MORE LIFE & DEATH DECISIONS

So you bought the surgical simulation *Life & Death* from **The Software Toolworks**, and now you think you could do an emergency appendectomy on a neighbor if you needed to. But what if that same unfortunate associate starts suffering from unexplained headaches? Maybe you should invest in *Life & Death II: The Brain*.

In this "game," you enter the neurosurgery wing of Toolworks General Hospital to decide the fate of your patients. You must know when to order X-rays, CAT scans, or other diagnostic tests. The chief neurosurgeon is on hand if you need a consultation before you take scalpel in hand and dig into those frontal lobes. You also need to sit through some

classroom sessions. Remember — it's not only *your* gray matter that needs improving.

For those who desire less intense entertainment from their PCs, The Software Toolworks is also releasing *The Games People Play*. Four popular parlor games — cribbage, gin, checkers, and backgammon — are offered in the package.

You can play two-, four-, or five-card cribbage, and standard or Oklahoma gin. The game allows you to choose from five different backgammon boards or cheat in checkers by switching positions with your opponent. *The Games People Play* will add a few new tricks to your favorite pastimes.

The Software Toolworks made its name with its award-

winning *Chessmaster* series, and now a new program has been added to the list. *The Fidelity Chessmaster 2100* has many of the same options that made the other games so popular — 2-D or 3-D graphics, huge libraries of opening moves, in-depth play analyses, and classic games in its memory. But *The Fidelity 2100* also has unlimited levels of play, an expanded "war room" mode, VGA graphics, and a special voice capability.

You can try blindfold or championship chess, and you'll be able to customize the game to your particular playing skill — there are 33 levels, from newcomer to master.

Arachnophobia

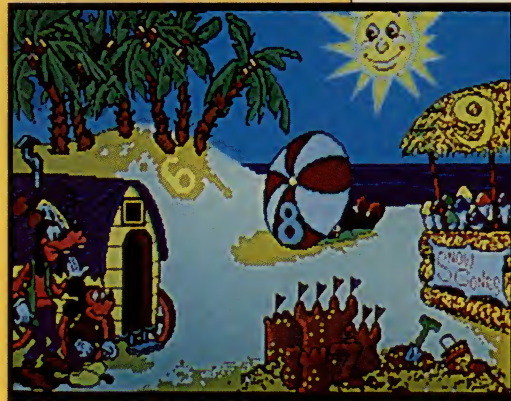


Okeefadoki Swamp, the Whatsamatterhorn, and other exotic locales to collect treasure. Luckily, Scrooge has the help of Launchpad and his nephews!

Aimed at children 2-5,

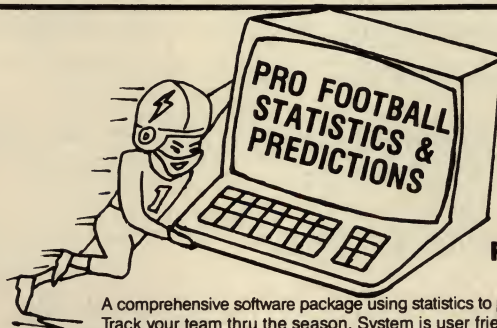
Disney's line of education games make learning more fun than should be legal. Preschoolers can learn the alphabet with *A Day at the Fair* and *Donald's Alphabet Chase*; learn to count with *The Big Surprise Party*; or

learn colors and shapes with *The Dazzling Magic Show* and *Goofy's Railway Express*. Other games include *Mickey's Crossword Puzzle Maker* (for children 5-8), which uses Disney characters to encourage children to create puzzles using word and picture clues; and *Mickey's Runaway Zoo*, in which a playful game of hide-and-seek results when the animals escape from Goofy's petting zoo.



Mickey's Runaway Zoo

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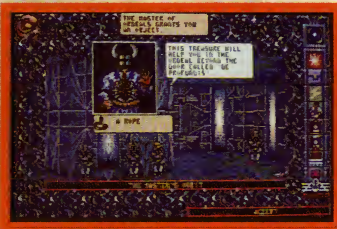
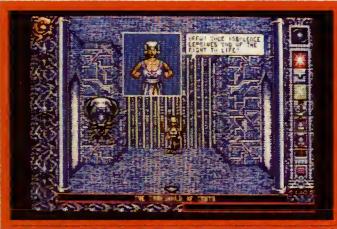
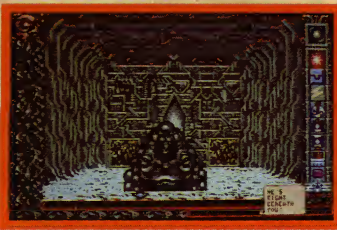
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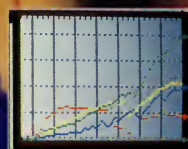
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